FLANDERS DC
INSPIRING CREATIVITY

Knowledge Partner

Vlerick Leuven Gent Management School

the Autonomous Management School of
Ghent University and Katholieke Universiteit Leuven

RESEARCH REPORT

SUSTAINING COMPETITIVE ADVANTAGE THROUGH PRODUCT INNOVATION: How to achieve product leadership in service companies

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FLANDERS DISTRICT OF CREATIVITY

Flanders District of Creativity is the Flemish organization for **entrepreneurial creativity.** It was founded in 2004 by the Flemish Government as a non-profit organization and enjoys broad support. Flemish businesses, academia, and public institutions use Flanders DC as a platform for cooperation in the pursuit of a more creative Flanders region.

Creativity is the key ingredient in making companies more successful and in helping regional governments ensure a healthy economy with more jobs. Flanders DC inspires creativity and innovation:

1. by learning from the most **creative regions** in the world,
2. by igniting **creative sparks** in everyday life and business, and
3. by providing **research, practical business tools and business training,** in cooperation with the Flanders DC Knowledge Centre.

1. Districts of Creativity: Inspiration from the most creative regions

Responses to global challenges are best found within an international network of excellence. With the single aim of learning from the very best, Flanders DC aims to unite the most dynamic regions in the world within the 'Districts of Creativity' network. Every two years, Flanders DC convenes the Creativity World Forum, bringing together government leaders, entrepreneurs, and knowledge institutions to exchange ideas about how to tackle pressing economic problems and make their regions hotbeds for innovation and creativity.

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2. Raising awareness: The best way to predict the future is to invent it

Flanders DC encourages entrepreneurs and citizens to look ahead and find creative solutions today for tomorrow's problems. Flanders DC has developed an idea-generation tool to encourage people and organizations to take the first step toward innovation. In addition, Flanders DC has run an awareness campaign entitled 'Flanders' Future' and has collaborated with national TV station één (VRT) on an idea show named The Devisers (De bedenkers).

3. The Flanders DC Knowledge Centre: Academic support

The **Flanders DC Knowledge Centre** serves as a link between Flanders DC and Vlerick Leuven Gent Management School. Each year, the Flanders DC Knowledge Centre publishes several reports and develops various tools, case studies and courses. All these projects focus on the role of creativity in a business environment and identify obstacles to, and accelerators of competitive growth.

The **Creativity Talks** – brief monthly, interactive info sessions – update you on these research activities. See www.creativitytalks.be for a current calendar and subscription information.

Research reports:

- **De Vlaamse economie in 2015: Uitdagingen voor de toekomst,** Koen De Backer and Leo Sleuwaegen, September 2005, Published in Dutch
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- **The Creative Economy: challenges and opportunities for the DC-regions,** Isabelle De Voldere, Eva Janssens, Jonas Onkelinx and Leo Sleuwaegen, April 2006, Published in English
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Published research reports can be downloaded via the Vlerick Leuven Gent Management School library catalogue or via www.flandersdc.be.

In addition to these research projects, the Flanders DC Knowledge Centre has also developed the following tools and training sessions:

- **Ondernemen.meerdan.ondernemen**, an online learning platform
- **Creativity Class** for young high-potentials
- **Flanders DC Fellows**, inspiring role models in business creativity

FLANDERSDC FELLOWS

- **Creativity Talks**, monthly seminars on business creativity and innovation
- **Innovix,** online innovation management game
- **Flanders DC Academic Seminars,** research seminars on business creativity and innovation
- **TeamScan**, online tool

TEAMSCAN

- **Web 2.0 Readiness Scan**
- **HR Toolbox**

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Introduction

The purpose of Flanders DC is to make Flanders better, more ambitious, and more creative. One of the goals of Flanders DC is to help companies to be more *'business creative.'* Business creativity helps companies to find better and more innovative solutions to deal with their strategic challenges.

This project should help service companies deal with the challenges associated with continuously offering a range of high quality, innovative product offerings. The research project should provide managers from service companies who want to lead the market through product innovation with a set of ideas and insights on how to organize for and exploit continuous product innovation.

According to the management literature, firms have three options to stay ahead of the competition.

- First, firms can optimize their processes and become a leading *operationally excellent* firm. Those firms make life 'easier' for their customers and/or offer products/services at extremely low prices. Examples include Dell, IKEA and ING DIRECT.
- Second, firms can get closer to their customers and offer individualized and customized solutions: they become *customer intimate*. Examples of customer-intimate firms include: Bank Van Breda & C° and Four Seasons Hotels.
- Third, firms can offer customers leading-edge products or services that consistently enhance features, performance, or the experience associated with those products or services.

In this project, we would like to zoom in on companies opting for the third option, which is called *product leadership*. Although this term is familiar to most of us, product leadership is a concept that is almost exclusively used for 'product companies.' There is hardly any literature on product leadership for service companies. Nevertheless, there are service companies that have become market leader because of their product leadership skills. Examples of 'product leaders' in the service industry are McKinsey, Cirque du Soleil, El Bulli, and Studio 100. These companies are perceived to *continuously* offer the *best* and/or *most innovative* products in their industries.[i] They lead their industry through continuous core product innovation.

PART A: What does it mean and what does it take to be a product leader?

The report consists of two main parts. *Part A* is more generic and explains what product leadership is all about. *Chapter 1* describes what it *means* to be a product leader from a customer's perspective. In short, product leaders have the best products or services in their market and they display the ability and determination to make products that customers recognize as superior – products that deliver real benefit and performance improvements.[1] But what does a 'best product' really mean? What particular product benefits do product leaders offer? And to what extent are best products innovative? Philip Kotler and Gary Armstrong – both influential marketing professors – provide us

i Both product companies and service companies offer a core product. For product companies, the core product can be a consumer good (e.g., shampoo, a DVD) or an industrial good (e.g., packages, engines). For service companies, the core product can be product-based (e.g., a restaurant), skill-based (e.g., service from a painter, a Cirque du Soleil show), or knowledge-based (e.g., medical care, consulting). Service companies, just like product companies, can add additional services, i.e. what companies add on top of the core product to customize the product.

with some interesting insights on this question. The most important product attributes that are used to communicate product benefits are: quality, features, style and design. Some product leaders also add an experience factor. They are very sensitive to the environment in which their products or services are sold or consumed. Chapter 1 elaborates on each of these different characteristics.

Chapter 2 explains what it *takes* to be product leader (in both service and product industries). We are aware that several books have been written on this topic. Unfortunately, the management literature offers a too fragmented and narrow view on product leadership. A part of the literature focuses on the development of more structured innovation processes and on instilling the appropriate innovation culture. In the marketing literature, attention is paid on how to set new products in the market and launch product innovation. The management control literature examines what performance measures to use to stimulate creativity and innovation in an organization. However, what is lacking is an *overall picture* on what it takes to be a product leader. So far, the management literature does not provide an integrated approach towards product leadership, and strategy implementation in general.

The *Product Leadership Pentagon* is an answer to these challenges. The Product Leadership Pentagon is a tool that is inspired by leading publications on innovation and case studies of well-known product leaders.[ii] The Product Leadership Pentagon lists 15 major actions that are common among product leaders. These actions cover many different aspects of management, such as leadership, goal-setting and strategy development, idea generation, marketing and commercialization, resource allocation, knowledge management, performance measurement, management control, and HR and rewarding, among others. As such, the tool presents a multidisciplinary approach towards product leadership. Chapter 2 extensively describes the tool and explains the actions that product leaders should take to become successful.

PART B: Product leadership in service companies

Part B of this report investigates to what extent product leadership can be applied to the services industry. Services have become increasingly important for the economic development in many countries. Because innovation is among the key drivers of growth and development, innovation in service firms has become an important topic for policy makers. That is why *Chapter 3* investigates how innovation in the service industry is applied, and focuses on the main differences with product companies.

Some publications have indicated that innovation is less attractive for service companies. This is because the results of these innovations are difficult to patent and easy to copy. Nevertheless, we see innovation in service companies, but innovation is often incremental in nature. In product companies, we tend to see more radical innovation. Due to its intangible nature, innovations in service industries are often non-technological, and require less or no R&D. The lack of R&D departments in service companies might give the impression that a formal process for developing new products is not needed. Chapter 3 shows that this is not true.

There are some differences between innovation in service companies and product companies, but there are many similarities as well. We can therefore conclude that product leadership is a viable

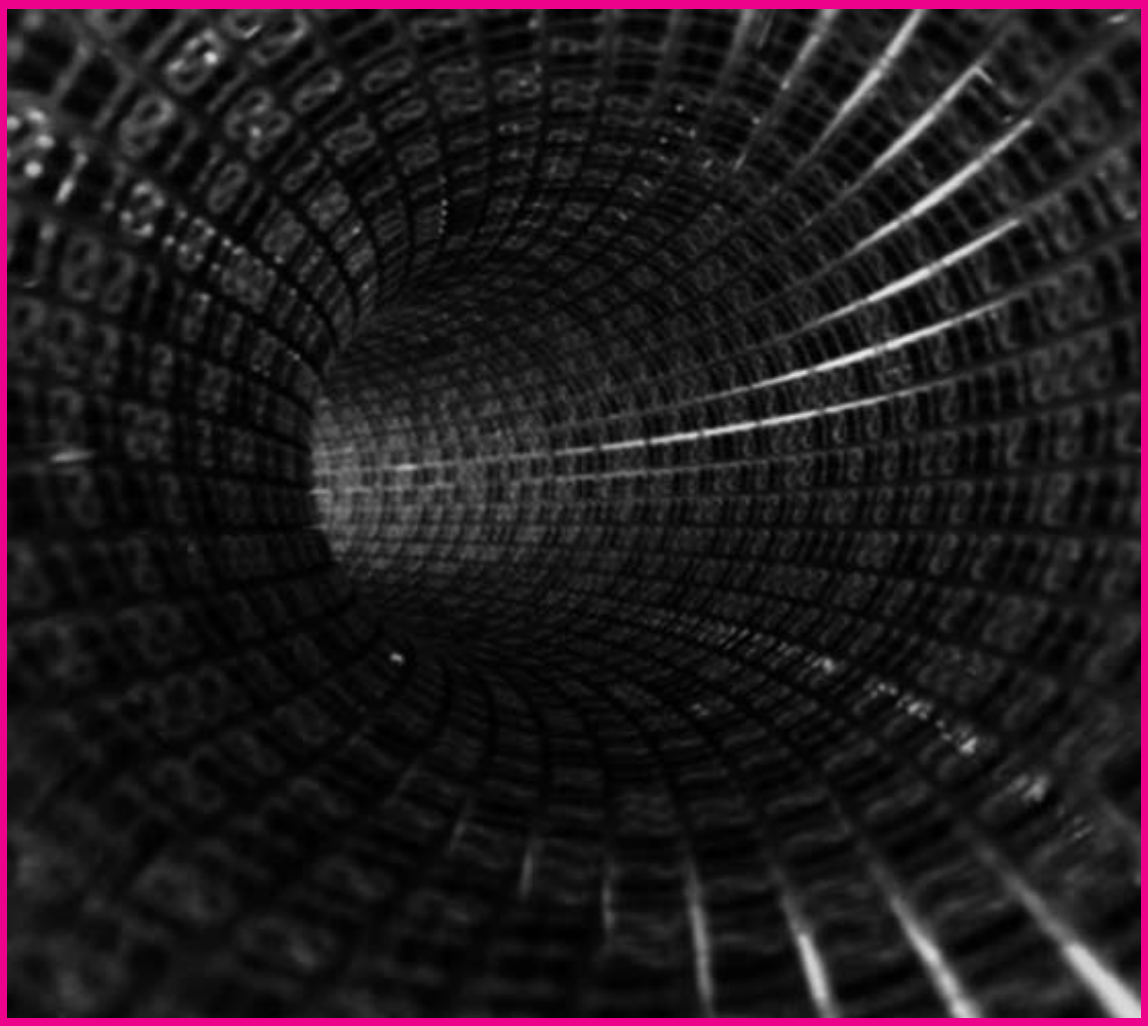
ii We have looked at the following case studies: Google, McKinsey, Logitech, Intel, Harley-Davidson, Cirque du Soleil, Apple, 3M, Pixar, Bang & Olufsen, and Porsche.

strategy for service firms, and we think it is strange that product leadership is not applied more by service companies. The nature of services might be a barrier for radically pursuing a product leadership strategy. Nevertheless, some of the most prominent product leaders are service companies.

Chapter 4 describes eight of these service companies that differentiate from their competitors through product leadership. We have done interviews with managers from the following service companies: *Corona Direct, Google Belgium, Habbekrats, Netlog, Trente Restaurant, VRT, Deloitte Belgium,* and *Studio 100*. These managers explain the central role of innovation in their strategy, and describe the most significant actions they've taken to become a successful product leader.

We hope these examples will inspire other managers (of service companies) to give innovation a more central position in their strategy.

PART A
WHAT DOES IT MEAN AND WHAT DOES IT TAKE TO BE A PROCUCT LEADER?



Introduction

If companies want to develop a sustainable competitive advantage, they need to offer products and/or services that keep attracting customers. Companies are often successful for a short period of time as they have launched a new attractive product or an appealing service. But companies find it difficult to remain successful over a longer period of time. Research at the Strategos Institute, Gary Hamel's international consulting company, has shown that only a small number of companies were able to provide sustained high returns to their shareholders in the last decade. The research indicates that not even 20 companies of the S&P 500 were able to provide higher shareholder returns for five consecutive years.[2]

Therefore, companies will only be able to be successful over the longer term if they do have good products and/or services, but also an organization that is able to produce and deliver consistently good products and/or services. Apple's success doesn't stem from its newest iMac but from its capabilities to continuously offer fashionable, well-designed and easy-to-use computers and other consumer electronics.

A convincing value proposition…

When a company grows, it needs to look for a common and convincing value proposition for all of its products. The value proposition communicates why customers should buy a company's products and/or services over that of the competitors. Logically the value proposition should be consistent for the entire product range. *All* IKEA's home furnishing products are cheap, well-designed, and functional. *All* Ryanair's flights are cheap. And Bank van Breda & C°'s service orientation applies to *all* its financial products.

Firms need to make choices as to their value proposition. Successful companies have made up-front, deliberate choices concerning which benefits they are going to offer and which not. In contrast many companies suffer from across-the-board superiority, trying simultaneously to outperform competitors on too broad an array of benefits, such as lower price, better service, nicer design, better accessibility, and so on. Crawford and Mathews (2001) argue that great companies never try to be the best at everything.[3] Instead great companies dominate and differentiate only on a few value attributes. Crawford and Mathews developed a very interesting framework to check how focused a company's value proposition really is. Their basic assumption is that every business transaction can be broken down to five major value attributes:

Figure 1 A convincing value attribute is focused

Value attribute	Relates to:
Price:	Cost of goods and/or services
Product:	Goods and/or services purchased
Access:	How easy consumers can obtain and use the products and/or services
Service:	All the extras consumers receive before, during, and after they buy the product
Experience:	How consumers feel about themselves as a result of goods and/or services.

Source: Crawford & Mathews (2001)[4]

Companies with a sustainable competitive advantage never try to be the best at everything. They overcome the constant temptation to strive for universal excellence, and rather decide to dominate on one primary attribute. In addition, they often select a secondary attribute that serves as a strong complement and helps further differentiate from the competitors. Companies with a great value proposition also realize that they cannot fall below industry par on the other three of the five value attributes. The key message is simple: only through focus do consumer-relevant companies create a meaningful image in the customers' mind.

Product leaders are companies that have decided to dominate on the product value attribute. They have the best products or services in their market and they display the ability and determination to make products that customers recognize as superior – products that deliver real benefit and performance improvements.[5] Typical product leaders are Electronic Arts, Apple, Ferrari, Google, Lego, Porsche, Kipling, Studio 100, McKinsey, Bang & Olufsen, and Cirque du Soleil. These companies continuously try to inspire their customers with their products and services. Product leaders should not be confined to product companies; service companies can also be product leaders. If the core product of the service provider – e.g., in the case of McKinsey it is strategic advice; in the case of Cirque du Soleil it is a show – is perceived the best in the market, this company is a product leader.

When companies dominate on the 'price' or 'access' dimension, they are called operational excellence firms. The objective of companies following this strategy is to lead their industry in price and convenience. Companies pursuing operational excellence are indefatigable in seeking ways to minimize overhead costs, to eliminate intermediate production steps, to reduce transaction and other friction costs, and to optimize business processes across functional and organizational boundaries. Dell, IKEA, Ryanair, easyJet, Wal-Mart are great examples of operational excellence firms.

Customer intimacy firms dominate on the 'service' or 'experience' dimension. Customer intimacy describes a strategy in which a company continually tailors and shapes products and services to fit an increasingly fine definition of the customer. This might be more expensive, but customer-intimate companies are willing to make investments in order to build customer loyalty for the long term. These companies look at the customer's lifetime value to the company, not at the value of any single transaction. Customer-intimate companies have decentralized marketing operations in order to increase the responsiveness of the various stores or distribution centers. MLP, a German financial services provider, is a very good example. Other customer intimacy firms are ABB, Superquinn (an Irish supermarket chain), and some very specialized banks, such as Belgian's Bank Van Breda & C°.

As already indicated, product leaders dominate on the product dimension. This is explained in greater detail in Figure 2: Crawford and Mathews's value attributes. They inspire customers with an assortment of great products, often unknown to the customers.

Figure 2 Crawford and Mathews's value attributes

LEVEL	ACCESS	EXPERIENCE	PRICE	PRODUCT	SERVICE
Consumer seeks the company 5	Give me a solution, help me out in a bind	Establish intimacy with me by doing something no one else can	Be my agent, let me trust you to make my purchase	Inspire me with an assortment of great products I didn't know about	Customize the product or service to my needs.
Consumer prefers the company 4	Make the interaction convenient for me	Care about my needs and me	Be fair and consistent in your pricing (this does not necessarily mean lowest price).	Be reliable in your selection and stock position so I can rely on you when I have a bind.	Educate me when I encounter a product or a situation I don't understand
Consumer accepts the company 3	Make it easy for me to find what I need, get in and out in a hurry	Respect me, treat me like a human being	Keep the prices honest, don't jack them up or offer big savings when there are none.	Be credible in your product and service offerings.	Accommodate me; bend over backward sometimes to show me you care.
Consumer underworld. 2 1	Block my way, hassle me, keep me waiting, make it hard for me to get in and out.	Dehumanize, disrespect me, ignore my needs.	Being inconsistent, unclear or misleading in your pricing.	Offer me poor quality merchandise and services I can't use	Give me experience I'd just as soon forget; give me a reason to tell my friends and relatives to stay away.

5 **Dominate** 4 **Differentiate** 3 **Par** 2 **Failing** 1 **Unacceptable**

Source: Crawford & Mathews (2001: 27)

… And an appropriate business model

Product leaders share a set of resources and capabilities that are remarkably consistent irrespective of the industry in which they compete. To be a product leader, companies have to show that they can create a steady stream of standout products that will keep customers awake with anticipation – products that turn people's heads and make their hearts beat faster. Product innovation is therefore a core competence of any product leader. Furthermore, product leaders have an ability to unearth commercially viable (technological) opportunities.

But at the same time, product leaders are also experts in marketing and selling. They know how to get customers to pay a price premium for their high-value products. Product leaders do have a capacity to patent, produce, and market innovations more quickly and effectively than rivals.[6] In addition, product leaders typically have a specific set of systems, structures, and processes that

support the pioneering mentality. We will explain the characteristics of product leaders in greater detail in the *Chapter 2*. The remainder of this section focuses on the decisions product leaders make on their product or service offering.

Product leaders' product decisions: What is a 'best product' anyway?

Product leaders offer state-of-the-art products.[iii] But what does 'best product' really mean? And what product decisions do product leaders make in this respect? When consumers prefer a company for its products, they believe they receive more benefits from that product than from any other competitor's products. For example, people buying a Ferrari believe they buy a car with a better motor, a nicer design, and more luxurious interior than most other comparable cars. When people consult McKinsey, they expect to receive better advice than from any other consultant in the market. But what particular product benefits do product leaders really offer?

Philip Kotler and Gary Armstrong – both influential marketing professors – provide us with some interesting insights on this question. The most important product attributes that are used to communicate product benefits are: quality, features, and style and design.[7] Some product leaders do also add an experience factor to what they offer.

Product quality. Above all, product leaders offer superior product quality. However, product quality has two dimensions – level and consistency. The quality *level* indicates how well a product is able to perform its functions for a specific target market. Here, the quality level refers to the *performance quality*.[8] For example, Bose's audio products have superior acoustics and sound qualities. Google has the most comprehensive and fastest search engine in the world. The shows of Cirque du Soleil are more daunting and more professional than most other circuses' shows.

Beyond quality level, high quality can also mean high levels of quality consistency. According to Kotler and Armstrong, product quality then refers to *conformance quality*, i.e. freedom from defects and consistency in delivering a targeted level of performance.[9] The Total Quality Movement mainly refers to conformance quality when they state that "quality is free." The idea is that investments in process improvements can reduce variance in output, scrap, rework losses, and warranty costs.[10] The quality image of Toyota stems from all the efforts done by the company to increase conformance quality, but not performance quality. All companies should strive for conformance quality. In this way, McDonalds can actually offer better (conformance) quality than some three-star restaurants if they consistently deliver the quality that customers expect.

From this description it is clear that product leaders strive for both a high level of performance and conformance quality. Many other companies (including operational excellence firms) only focus on the latter!

Product features. Product features are the characteristics of the product or the service. Product leaders ensure that their products have more and better features than the competitors' products.

iii Once again, it is important to remark that we define a product as anything that can be offered to a market for attention, acquisition, use, or consumption and that might satisfy a want or need. This definition is in line with Philip Kotler and Gary Armstrong's definition of a product. According to these authors, products include more than tangible goods, but also encompass events, services, persons, places, etc. We will also adopt this broad definition of a product in this text.

They often add new features to differentiate their brands and sustain their competitive advantage. Many product leaders are very explicit about their product's features. Porsche publishes extended technical specification data for each of its different models. Swiss luxury watchmaker Rolex mentions exclusive features for its different collections.

Being the first producer to introduce a needed and valued feature is an effective way to compete. For example, Triodos Bank was one of the first banks that added socially responsible investments in its product portfolio. Adding new features emphasizes a product's difference from other products of a similar nature. Benetton added color to the fashion apparel industry and focused its entire branding, United Colors of Benetton, around this theme. Later Benetton has added the glamour-oriented *Sisley*, and *Playlife* American college style.

Product style and design. Style and design are key differentiating elements actively used by companies such as Apple, Bang & Olufsen, Alessi, and Ferrari. Kotler and Armstrong define both concepts as follows: "Design is a larger concept than style. Style simply describes the appearance of a product. Styles can be eye catching or yawn producing. A sensational style may grab attention and produce pleasant aesthetics, but it does not necessarily make the product perform better. Unlike style, design is more than skin deep – it goes to the very heart of a product. Good design contributes to a product's usefulness as well as to its looks."[11]

Apple is probably the best-known example of a company using both style and design to make a meaningful difference in the MP3 and the phone market. "The iPod has become the icon of simple design. How did this happen? First, the iPod is aesthetically minimalist. So did Apple just take a rectangular block and add some buttons? There is much more behind it than can be seen at first glance. The shape of the original iPod is actually based on the golden ratio. With roots in the Fibonacci sequence, the golden ratio is a proportion that is found abundantly in nature, mathematics and ancient Greek art […] Apple built a whole visual brand language out of the details, from the radii of the rounded corners to the glossy surface treatment to the lack of exposed screws and minimal number of buttons. Second, the iPod's user interface is intuitive. You can find your songs quickly. But not only that, it connects to your computer easily. Your computer charges it as well. The attached iTunes software makes it easy to store and manage your music. In fact, it even sells you more music at the click of a button. Apple did not limit its definition of user interface to the small screen on the product. They mapped out all the touch-points you go through when finding, storing and sorting through your music, and looked for opportunities to simplify your life. Stories persist to this day of Steve Jobs returning prototype after prototype of the iPod to the lab bench because he could not get to his desired song within three clicks."[12]

Bang & Olufsen is another design-driven innovation company. B&O gives designers free reign to create new products that will challenge engineers to find a way to manufacture them. Interestingly, B&O has never employed in-house designers. The philosophy behind this is that B&O doesn't want designers to be unduly influenced by the limitations of manufacturability.[13]

Style and design are mainly used in product industries. They are less used in service industries. In service industries (but in product industries as well), product leaders pay attention to providing the customers with memorable experiences. This will be explored in the next section.

From products and services towards experiences. An increasing number of firms try to provide total customer experiences. As products and services become more and more commoditized, companies are looking for a new way to differentiate themselves from the competitors. According to Joseph Pine and James Gilmore, experiences are very different from products and services: "When someone buys a good, he receives a tangible thing; when he buys a service, he purchases a set of intangible activities carried out on his behalf. But when he buys an experience, he pays for a memorable event that a company stages to engage him in an inherently personal way."[14] The ideas of Pine and Gilmore have led to an "experience revolution" and new concepts like "co-creation experiences", "experiential marketing", and "experience branding" are now commonly used in both the strategic and marketing management literature. Unfortunately, there is no consensus on what the term "experience" is. What is clear, however, is that experiences focus on customers' emotional rather than on their functional needs. Experiences occur as a result of encountering, undergoing, or living through things.[15] These experiences can occur when consumers shop, buy, and/or consume products or services.

Experiences have an external and an internal component. The external experience is the atmosphere, entertainment, or surprise factor provided by companies in the buying and consumption process. When companies provide a fantastic shopping experience, they are working on the external experience dimension. There is however also an internal experience dimension. When companies really connect with their customers by providing respect, care, and some form of intimacy, they address the internal experience dimension. The "experience attribute" identified by Crawford and Mathews (see Figure 2) focuses more on the value created by offering a great internal experience. (Maybe this attribute should be labeled the "connectivity" attribute, rather than the "experience" attribute.)

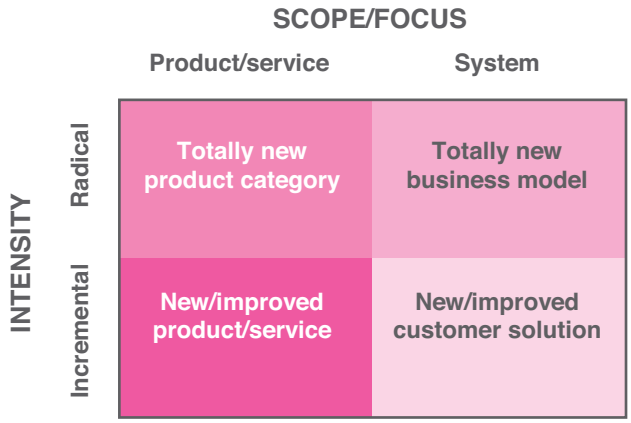
Product leaders often try to differentiate on the external experience factor. Think about many of the luxury fashion brands, such as Louis Vuitton and Ralph Lauren: they all have their own stores that help to create the brand experience. Product leaders make the shopping experience easy, pleasant, relaxing and comfortable. Surprisingly, this feeling of being at ease is remarkably easy to overlook, but it can help to make the difference. Product leaders are very sensitive to the environment in which their products or services are sold or consumed. This holds for Disney, Barnes and Noble, Benetton, and many others. Every detail should be right!

Product leaders' innovation decisions

From the above it is clear that product leaders offer "the best" or at least "very high quality" products or services in their market. Many companies spend hundreds of millions, advertising that their brands are "the best", "new", or "significantly improved." These claims center around the idea that what consumers want are products differentiated by their efficacy or features. In reality, consumers don't care about efficacy claims they can't verify in their kitchens or laundry rooms or performance claims that can be tested only in a wind tunnel or on the Autobahn.[16] Dominating on product only succeeds if you inspire consumers with true product innovation! Product leaders therefore need to invest significantly in both incremental and radical product innovation.

Innovation has been a buzz word for some time now. There is a lot of confusion about the concept. So before we explain how product leaders look at and approach innovation, it is important to clarify the meaning of the concept of innovation. Innovation has been defined along several dimensions. Two common dimensions are the innovation scope or focus and the innovation intensity. The *innovation scope* refers to where companies focus their innovation efforts. Companies may want to innovate on products and services or may want to create an entire new business model or business system. Many pharmaceutical companies develop new products, but the underlying business model (i.e. the way how money is earned and how profits are made) is relatively stable over time (although the development of generic drugs has created significant pressure on many pharmaceutical companies' business systems). A second dimension relates to the *innovation intensity level*. Innovation can be incremental, which is about doing what we do but better. Radical innovation leads to new-to-the-world products or service concepts, or even to new business models. These two dimensions lead to four potentially different innovation approaches, as defined by Jean-Philippe Deschamps (see Figure 3).[17]

Figure 3 Four different innovation approaches



Source: J.-P. Deschamps (2008: 168)

At the bottom left of the quadrant, we find the 'new/improved product/service' innovation strategy. This is the most common type of innovation where companies offer a better version of their product or service.

> *EA Sports, the sports game software company of Electronic Arts, has yearly upgrades for its numerous sporting games, such as Fifa (the soccer game), NHL (the ice hockey game), Tiger Woods (golfing game), and NBA Live (a basket ball game).*

According to Deschamps, this type of innovation often proceeds in a bottom-up mode, where marketers, product managers, and R&D engineers work together and improve existing products or services in order to remain competitive. In most of the cases, these innovation efforts are considered to be part of those people's operational activities. Consequently, top management isn't closely involved in these initiatives (as long as product categories meet their financial objectives).
A second innovation approach deals with the introduction of a totally new product category or

service offering (situated in the upper left corner of our quadrant).

> *Examples of radical product innovations are Procter & Gamble's electronic toothbrush Crest SpinBrush, launched in 2001 and an immediate hit already one year later, Intel's Pentium processors, Gilette's Mach3 razor blades and Apple's iPhone.*

These innovations do require substantial support from a company's top management team, because the new product is a strategic move that often falls outside of the current scope and structure of the company.

A third innovation approach is the creation of a totally new business model (see the upper right corner of the quadrant). A business model can be defined as the way a company goes to the market, earns revenues, and makes profits out of these revenues. Most examples of radical innovation are business model innovations.

> *Dell's direct sales model was a radical new business model innovation in the 1980s. Benetton and Kipling's entry into the clothing and bags industry is an example of business model innovation. Both companies transformed a functionally-oriented industry into a more emotional industry, providing emotions and experiences to its customers. Ryanair and easyJet are low-cost airline companies that have transformed the traditional airline industry by focusing on a new market segment and a different business model.*

Business model innovation – sometimes called strategic innovation – has been investigated extensively in the last years. Kim and Mauborgne's *Blue Ocean Strategy* is probably the best-known book in this respect, as it gives managers a more structured approach to create totally new business models, and to discover new market space.[18] Developing new business models requires a significant commitment from an organization's top management. By definition, the new business doesn't fit with the organization's traditional organization structures. That is why the top management team needs to create a new structure that allows the new unit to grow without interfering too much with the existing businesses. The challenge of creating an ambidextrous organization, an organization that is ready to exploit and explore, has been extensively discussed in the management literature.

Deschamps has identified a fourth innovation approach and has called it the provision of a new/improved customer solution (see lower right part of the quadrant). In this fourth innovation approach, organizations offer additional (advisory) services with the core product or service offering. These organizations then move towards a customer intimacy strategy.

> *Hendrix, the Dutch animal feed company, has a consulting firm, Bestra Consultancy, offering free business advice to Hendrix's best customers. Similarly, Tetra Pak offers a lot of extra services for its best customers, including strategic and marketing advice on where and how to grow the business.*

Product leaders focus their innovation efforts not on the entire spectrum of innovation approaches. Their innovation efforts are focused on the left part of the quadrant (see Figure 3): (1) new/improved products and services and (2) totally new product (or service) categories. In the remainder of this publication, we therefore won't discuss business model innovation and the provision of a new/

improved customer solution, but rather what product leaders do to continually push their products into the realm of the unknown, the untried, or the highly desirable. Product leaders consistently strive to provide their markets with leading-edge products or useful new applications of existing products or services.[19]

Conclusion

This chapter indicated that successful companies have a compelling value proposition, indicating where the company aims to make the difference. Product leaders consistently dominate on the value attribute “product”. From a customer perspective, “dominating on product” means that product leaders offer *the best* and *the most innovative* products or services in their market.

Introduction

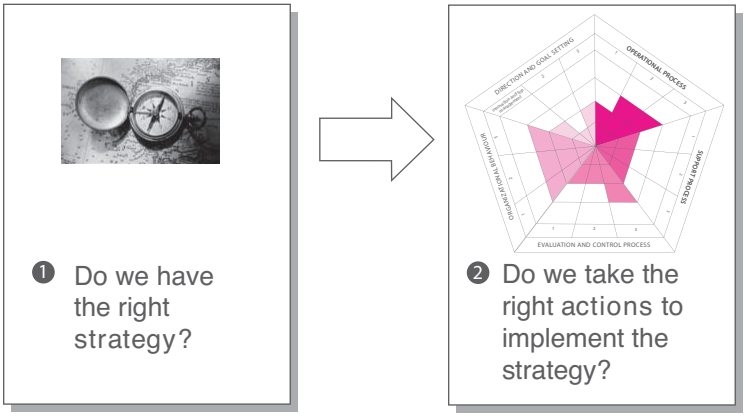
In the previous chapter, we proposed that product leaders have developed specific competences that allow them to offer *the best* and *the most innovative* products or services in their market, year after year. These competences relate to the core processes of invention, product development, and market exploitation. At the same time, product leaders have created a set of systems, structures, values and cultures that support these competences.

In what follows we present a strategy implementation framework that helps to understand what particular actions product leaders have to take in order to lead their markets. You will note that the challenges are huge; developing product leadership competences takes time and a lot of efforts. But the stories we present show you that the efforts pay off.

A framework for strategy implementation: What does it take to be a product leader?

Companies are only successful over a longer period of time if they have the right strategy and if they take the appropriate actions that support that strategy. This is illustrated in Figure 4.

Figure 4 From strategy to actions



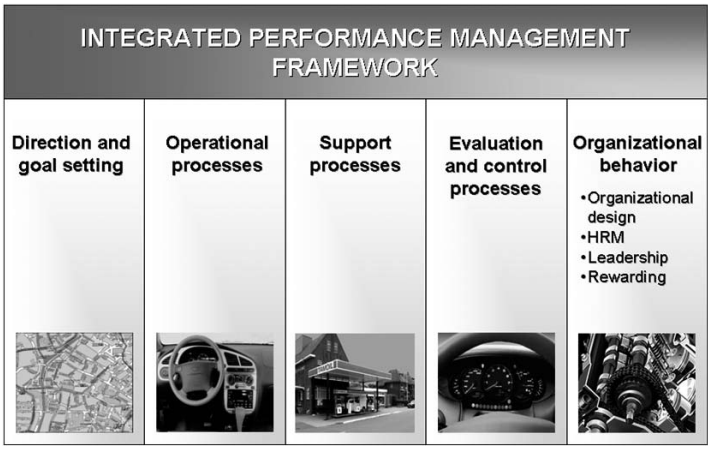
In the previous section, we proposed that the **right strategy** contains a convincing, focused and unique value proposition. The value proposition communicates why customers should buy a company's products and/or services over that of the competitors. This value proposition should be supported by the right business model. Companies that continuously want to offer the best and most innovative products or services in their market need a product leadership business model.

But strategies need to be implemented if companies want to be successful. Implementing strategy implies taking **actions that support the strategy**. But what kind of actions are we talking about?

In our book *Integrated Performance Management: A Guide to Strategy Implementation*, we presented

an Integrated Performance Management Framework that identified the critical dimensions of a successful strategy implementation.[20] One of the central propositions in the book is that companies only implement strategies successfully if they undertake specific actions in each of the five domains of this framework simultaneously. These five dimensions are presented in Figure 5.

Figure 5 Integrated Performance Management Framework



Source: Verweire and Van den Berghe (2004: 87)

- *Direction and goal setting* involves all processes and actions that lead to the formulation and communication of the organization's mission and vision, and their translation into concrete strategies and performance goals. Direction setting is the most widely recognized managerial activity, and involves charting an organization's course, mobilizing support, and ensuring alignment with stated goals.

- Operational processes are those activities and processes that are concerned with the creation or delivery of a product or service. Operations are more than just production activities, they also include product development, logistics, marketing and sales, and service activities. Michael Porter has called these operational processes 'primary activities.' These activities/processes produce goods and services that external customers consume, and they generate the revenues for an organization.

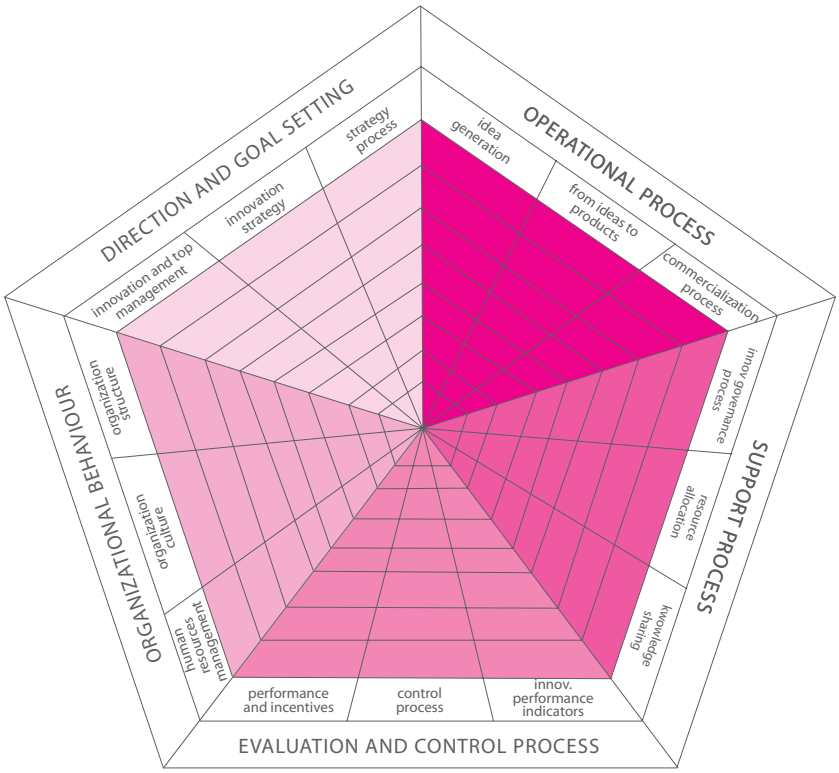
- Support processes help to improve the effectiveness and efficiency of the operational processes. They do not produce output for external customers, but are necessary to running the business. Support activities include purchasing and procurement, technology development (to improve the products and the processes), finance, accounting, legal and governmental affairs, etc.

- Evaluation (monitoring) and control processes are designed to ensure that the organization is performing as planned. These processes detect perturbations, initiate corrective action, and restore the organization to its previous equilibrium.

- Organizational behavior is the last component of the Integrated Performance Management Framework. This component incorporates those activities that create commitment and motivation across all employees and managers within the organization. The organizational behavior component typically encompasses HR-related activities.

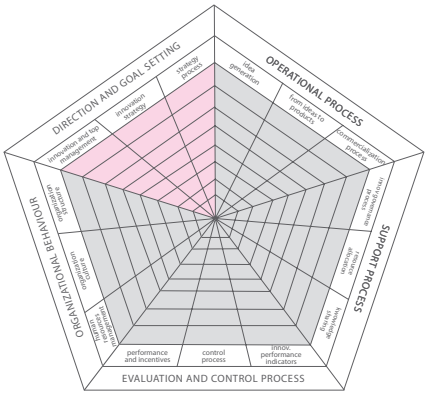
In what follows, we will describe what particular actions product leaders from different industries have taken to be successful over a longer period of time. All these initiatives are summarized in our Product Leadership Pentagon, which is a tool that measures how well companies score – relative to a benchmark – for each of those actions.

Figure 6 Product Leadership Pentagon



Direction and goal setting

This dimension involves all the processes and actions that lead to the formulation and communication of the organization's mission and vision, and its translation into concrete strategies and performance goals. Product leaders use direction and goal setting activities to stress that innovation is a top management priority. Furthermore, they have defined a clear and ambitious innovation strategy, and have developed a clear set of processes that put innovation in the core of the strategy process.



1. Innovation and top management

Leaders are personally involved with visioning, launching, steering, and the coaching of innovation efforts

Product leaders believe that innovation is the primary source for the company's competitive advantage. This is not a statement that is declared at the top, but also a belief that is shared by everyone in the organization. However, the top is responsible for bringing this message, over and over again. And companies can only survive if top management is committed to deliver a continuous stream of profitable innovation over time by harnessing internal and external resources. Without management support the creation of a culture that nurtures and fosters innovation becomes almost an impossible objective to achieve.

> *"August 2003 was marked with celebrations for the US-based global motorcycle and motorcycle accessories major Harley-Davidson Inc, (H-D). The company announced the culmination of its 14-month long 100th anniversary celebrations with a three-day special event in and around Milwaukee (Wisconsin) […] In September 2003, the company was given the 'Outstanding Corporate Innovator (OCI) Award' by the Product Development and Management Association (PDMA). In December 2003, H-D got the 'Technology Leader of the Year Award' from Industry Week […] This was made possible because the company had made innovation a 'corporate philosophy' over the years. According to industry experts, H-D's growth was at heart a story of its constant focus on innovation at the product, process, marketing and organizational levels."*[21]

> *"The Cirque du Soleil has been a phenomenal success story. In only twenty years, it has carved out a unique niche in the entertainment industry, spread to cities all over the globe, and earned rave reviews every step of the way. The Cirque is the world's fastest-growing diversified live entertainment conglomerate, growing at a rate of more than 15 percent a year. The organization has continually pushed the envelope on innovative entertainment. Cirque's management claimed that the mission and values that led to the formation of the company in the 1980s were still alive […] From the very beginning, Cirque tried to establish itself as a circus which was quite distinct from the others in the*

business. And to maintain this reputation, it kept constantly innovating and adding new acts in its kitty. Cirque strived to deliver the best possible performance to provide novel experience to the audience. The company aimed at providing an enriching experience to its customers in every performance that it delivered. Creativity was evident when it came to costume designing, sets and props, HR policies, the way the employees were kept motivated and, most importantly, the way the shows were developed."[22]

Top managers are crucial in this entire process. According to innovation guru Jean-Philippe Deschamps, they get personally involved in the innovation efforts and they understand that innovation is not the responsibility of certain departments within the company (such as marketing, R&D, IT) but is a company-wide effort that must be continuously encouraged and developed with innovation-enhancing campaigns. They are passionate for their mission and for innovation, and they have a burning desire to share this passion with their staff. They instinctively create an environment that values the search for opportunities and the generation of ideas to exploit them.[23]

Senior managers are crucial for a company which aims to become a product leader, because they play four important roles in the innovation projects:

- "As team launcher, they help to establish the business charter for the project and ensure that the right people are engaged in the effort.
- As energy source, they drive support for the project through the organization, validating the importance of innovation.
- As commitment manager, they ensure that once the project is on its way, the resources promised are available.
- As sponsor/coach, they provide counsel to the team when this is needed, and they communicate their view on the progress of the project".[24]

"Nintendo launched the Wii computer game console during 2006 and has hugely outsold its competitors, Sony's PlayStation3 and Microsoft's Xbox 360. Its success is not because of superior processor technology but a new gaming experience which appeals to customers previously uninterested in this form of entertainment. It is the attitudes of Nintendo's leaders and how they approach innovation that is at the root of the Wii's success. Nintendo President and CEO Satoru Iwata realized that many non-gamers have an aversion to the look of game controllers lying round their living room, as well as the size and power consumption of traditional consoles. He challenged the Wii developers to solve this problem by literally stacking two DVD cases together and asking them to design a console that was no bigger than them. 'We are not competing against Sony or Microsoft,' said Iwata. 'We are battling the indifference of people who have no interest in video games.'"[25]

Top management accepts risks and tolerates a normal proportion of failures in projects and ventures

Uncertainty, risk and occasional failure are all inherent aspects of innovation.[26] Organizations where innovation is a 'must' view these three elements as an opportunity to try new things, learn and improve performance.

The courage to take risks refers to being ready to bet one's resources on a new and often untested business proposition. Innovation leaders have the courage to focus, which means identifying unambiguously the things they will not do or the things they will not stop doing. They also must have the courage to cannibalize themselves. They have to make their own products obsolete before others force obsolescence on them.

An absence of failure is an indicator that serious opportunities for innovation are being missed. A 'no blame' culture tolerant of experimentation and failure is essential if long-term innovation programs are to thrive. Employees usually tend to interpret reprimands for mistakes in innovation as criticisms of their personal initiative and judgment. This often leads to a destructive 'self-censorship' and low morale as they confine themselves to 'safe', low-risk options.[27] It is therefore the responsibility of the top management to create an environment where failure is considered part of the learning experience. If employees are not reprimanded for making mistakes but encouraged to learn from them and to try again, managers can be sure that the success will be greater than expected.

> *Google's executives are an excellent example of management who appear not to be discouraged by failure. In fact, they support it: "Please fail very quickly - so that you can try again. I'm so glad you made this mistake. Because I want to run a company where we are moving too quickly and doing too much, not being too cautious and doing too little. If we don't have any of these mistakes, we're just not taking enough risk."*[28]

However, it is also the innovation leaders' responsibility to ensure that there is appropriate feedback on the performance and innovation's contribution to corporate success. Top management should evaluate practices, and where necessary, take action to effect improvements.

Creativity, innovation and entrepreneurship are explicit part of the company's values and purpose

A great company not only sustains itself, but it provides continuing evidence of the value of its existence. It not only makes a product or provides a service that people want, but it does so in a way that makes people glad that this particular company has come into existence. A clear 'purpose' helps companies reach this goal. Companies like Motorola and Microsoft have a very clear idea of what they are trying to achieve. Where a purpose underpins the business of the firm, there is an unavoidable moral discipline that engages individuals. According to Nikos Mourkogiannis, 'discovery' is one of the four fundamental purposes that helps companies excel in today's turbulent environment. Discovery is the fundamental purpose that we find back with many product leaders.[29]

> *"Masaru Ibuka, the founder of Sony, had clear ideas about the reasons for its incorporation – to establish a place of work where engineers can feel the joy of technological innovation, be aware of their mission to society and work to their heart's content. Such ideas, driven by the purpose of discovery, made it tolerable that he and his colleagues sat in conference for weeks, trying to figure out what kind of business this company could enter".*[30]

> *Cirque du Soleil is another great example. "An essential part of Guy Laliberté's overall philosophy is his commitment to creativity over profits. He wants the Cirque to be a haven for creators, enabling them to develop their ideas to the fullest […] In keeping with*

his dedication to creativity, he demands 100 percent artistic freedom when negotiating sponsor partnerships. That wish to retain control over the creative process is the main reason why Cirque du Soleil has not gone public. According to Laliberté, artistic control allows him to make decisions that don't appear to make business sense."[31]

It goes without saying that innovation is about challenging the status quo and introducing new and, one hopes, better products, processes, services or management approaches. Innovation requires curiosity, experimentation and openness to change. Innovation leaders are those who constantly challenge the present stage of affairs, encouraging wild ideas and instigate trying new things in their companies. Therefore, product leaders must have the courage to foster a climate of experimentation and permanent change in their organizations. Only if you have a few mavericks and innovation champions in your management team, innovation becomes an explicit part of your company's values and purpose.[32]

Consciously or instinctively, innovation leaders challenge industry assumptions in order to discover opportunities to increase customer value. Value creators, typically, have an insatiable curiosity about their customers' needs empathy with their conscious or subconscious frustrations, and an instinct for what customers might need or want in the future.

"As Akio Morita (co-founder of Sony Corporation) stressed in his story of Sony's legendary Walkman, this type of curiosity is not synonymous with a thirst for traditional market information. No market research, he argued, would have indicated a need for the Walkman. Sony's past advertising slogan 'You dreamt it! Sony made it!' reflects the company's view of its innovation mission: 'To redefine value constantly by correctly guessing the customer unarticulated desires, and applying our technological expertise to satisfy them.'"[33]

2. Innovation strategy

Innovation should be one of the key elements in top management's communication in product leaders. But product leaders do more than putting creativity, innovation, and entrepreneurship in the centre of the company's mission, vision, and values. They also define an innovation strategy that helps to realize the company's ambitious goals. We will describe three key elements of that innovation strategy.

Top management has clearly defined areas where the company wants to innovate in terms of products, markets or technologies

Product leaders decide and define the areas where the company wants to innovate. Thus, top management should provide their staff with a clear:

- "Sense of purpose: Why do we want to do certain things?
- Sense of direction: Which way should we go?
- Sense of focus: What should and will be our priorities?"[34]

These questions help to define the company's vision and scope of innovation activities. The management of product leaders charts the field of innovation and defines what it expects from it

and in which specific areas innovation is desired. In his book *The Innovation Manual,* David Midgley has called this the 'Innovation Charter' or 'Strategic Roadmap' (as it also known). It is an internal document, considered as an extension of the firm's strategic plan that links objectives and strategies to the specifics of the innovation program."[35] For example, management may want to develop new products and introduce them in their existing markets. Or they might want to target totally new markets through the creation of 'new-to-the-world' products or services. Whatever options the top management has chosen, they will need to clearly define the type of innovation they are choosing and the priorities that go along with them. These should be communicated to the employees in order to align strategies, processes and organizational structure.[36]

"The Strategic Roadmap deals with purpose, growth targets and the role of innovation in meeting those targets. It sets out the relative emphasis on incremental and breakthrough innovation, as well as the risk and return profile the firms seeks to achieve across its innovation program. The Roadmap also comments on the way the firm sees its capabilities, structures and culture evolving, and at what rate it expects this to occur. Finally, and most critically this Roadmap provides clear guidance on the areas of innovation the firm will support and those it will not. In due course, executives can translate this guidance into specific objectives for project teams responsible for innovation in each of these areas".[37]

"Televic is a Belgian manufacturer of high-quality products and solutions for targeted audio, multimedia, and communication markets. Televic has a sophisticated system for product development management that helps to prioritize projects and monitors progress. Televic classifies new product development projects as Cat 1 (product enhancement), Cat 2 (important feature changes), Cat 3 (cost redesign initiatives), and Cat 4 (new technology). Decisions regarding the introduction of new Cat 4 projects are monitored by the CEO, Lieven Danneels. On top of that, it is decided that no more than 25 percent of all the projects can be Cat 4."[38]

"Steve Jobs has been the leading force in defining Apple's innovation strategy and innovation portfolio. He said, 'The way we look at it is we don't want to get into something unless we can invent or control a core technology. The core technology (of consumer devices) is going to be software. We're pretty clever at hardware… but the competitive barrier will be software. The more consumer products evolve the more they will look like software in boxes.' You can argue with his logic or his conclusions regarding the competitive role of software in consumer goods, but his vision is clear and his message to his team at Apple is unambiguous: Fill the portfolio with defensible software innovations. Blend in other innovations but put your focus on innovative software. Apple's Steve Jobs stepped up to the strategy and portfolio leadership requirements by answering three of the most important questions:

- *How much innovation does my company need?*
- *What are the areas where I should focus the innovation?*
- *What portfolio of innovation types do I need? How much business model innovation? How much technology innovation? What mix of incremental and radical innovation?"*[39]

The company invests both in incremental innovation and in radical innovation

Companies, especially those that are technology-driven, often find themselves in the disjunctive situation of whether to invest in incremental or radical innovation. These different types of innovation require different amounts of investment and need to be managed differently. As can also be expected, the payback period for those radical innovations will be longer and more risky.

Incremental innovation leads to small improvements to existing products and business processes. It can be thought of as an exercise in problem-solving where the goal is clear. What needs to be managed is how to get there. At the opposite end, radical innovation results in new products or services delivered in entirely new ways. It can be thought of as an exercise in exploration where there might be something relevant in a particular direction but what will be found is unknown.[40]

For some periods of time, a company can be tremendously successful with only incremental changes to its products. However, this success will not last long if the competition comes up with breakthrough technologies that make the existing products or services obsolete. A traditional view of the innovation cycles predicts relatively long periods of evolution (incremental innovation) punctuated by short periods of revolution, where incremental innovation is useless and radical innovation is required.[41]

Many companies seek a target proportion of radical innovations within their development portfolio, depending on the type of industry. This proportion can range from 10 to 20 percent of the total innovations. It is important for each organization to find the right balance between incremental and radical innovation so that companies can survive as product leaders.

> *"Under Steve Job's management from 1998, Apple launched different products following a trend of incremental innovation. It started with a fresh line of iMac PCs in a range of cocktail colors; and a year later it introduced the iBook, a line of laptops in the same trendy colors as the iMacs. Another hit product Apple launched was its eight inch cubed hard disk, called the G4. Although the incremental innovation on its PC based products was aiding a positive growth for the company, Steve Jobs and his team were also observing the changes in trends and technology in the market in order to find a gap they could fill with a breakthrough product. This is why they were following closely in the late 1990s how the traditional ways of distributing music were being challenged by MP3, a software that compressed audio tracks into digital format, that could be stored onto a portable music device at a tenth of it previous size. Jobs and his team, sensing the growing popularity of its computer-based MP3 digital music movement, introduced the iPod in October 2001 as a way for consumers to take their entire music libraries with them wherever they went. By 2004, Apple's iPod had over 52 percent of the portable music device market."*[42]

Innovation and experimentation are seen as a competitive necessity, not as a 'nice to have'

During the early years of the 20th century, companies considered innovation an expensive activity which didn't bring much return on investment. The organizations that kept hold of their innovation projects, focused only on developing new products. These new products were created in the R&D department in an unstructured and ad hoc way. However, this scenario changed in the mid 1900s

when innovation became an essential tool for the survival of businesses. Companies were forced to innovate because of an increasingly competitive environment. Many companies started to see the need for innovation, and they came up with new and better products, processes, and services faster and faster.[43] Product leaders see innovation and experimentation as a competitive necessity, not as a nice to have. The leadership team must recognize that product innovation is a business priority, and that they must lead here.

All too often companies launch innovation projects for marketing purposes. They publish their innovation efforts in their annual reports and think that the 'label of innovation' will give them recognition with their customers and their employees. In those cases, innovation is seen as a nice to have. When results are not up to expectations or when new expensive strategic initiatives are launched, the innovation initiatives are the first ones to be given up. The idea behind all this is that innovation doesn't hurt… but doesn't help neither.

Management's real commitment to innovation and entrepreneurship should be communicated through a series of forceful and consistent messages, repeated again and again. The companies that have become innovation powerhouses are those that treated innovation as a core process and tirelessly worked on improving their efforts year after year.[44]

> *"One thing 3M discovered is that innovation does not just happen unless you make sure people know it is a top priority. Employees understand the strategy of the company and know exactly how the innovation process within the organization works. 3M only needs to provide them with enough freedom and resources and the employees will make it work."*[45]
>
> *"Famous for its 'paranoid' work culture, Intel's business model emphasized consistent product innovation. The top management believed that if the company did not make older products technology obsolete, competitors would. Many analysts believed Intel's success was as much about technology as management. They attributed the success of Intel to its unbroken leadership chain. As one great leader retired, another took over. Intel's leadership seemed to be the product of a distinctive corporate culture based on a strong set of values."*[46]
>
> *"The culture of innovation in Pixar came from the realization that they could not be complacent and had to always stay ahead of the curve, as competitors were quick to copy any new steps that were successful. Employees were encouraged to think in terms of steps. Each new movie was likened to a stepping stone where one could learn and try out new things to find out what worked and what did not. Intense self-scrutiny ensured that Pixar benefited from all the experiences. 'At the end of each feature we do a brain dump. It's not a matter of blame for things that went wrong; it's a candid self-assessment. Out of this self-assessment we come up with an operating theory for the next film. During the next film we'll fix those problems, and we'll discover new ones. You can never perfect the process,' said Catmull, founder of Pixar."*[47]

3. The strategy process

Defining a strategy is one thing, ensuring that the entire organization knows about it is another thing. An innovation mindset affects the strategy process in several ways. First and foremost, product leaders focus more on the long term. But there are other elements in the strategy process that product leaders focus on.

The new product/service strategy for the business is clearly communicated to and understood by all who need to know

In many organizations, top managers see innovation as the key to achieve the company's overall goals. But all too often, innovation remains a hollow slogan without any concrete initiatives on the work floor. (Especially in turbulent times, top management forgets about the commitments made to innovation.)

Top managers see innovation too much as the product of visionaries. When we look at where new innovative ideas come from, we typically point to a visionary – Steve Jobs, Bill Gates, Anita Rodick. The reality is that most new ideas originate from much lower in the organization. Gary Hamel, known for his controversial statements, has put it as follows: "It is ironic that people often say that change must start at the top. This is patent nonsense. How often does the revolution start with a monarchy? Not often, I contend."[48] In a similar way, we argue that innovation only works if people at all levels in the organization are asked to think about the strategy and are able to provide input. For that reason, the top management needs to spend a lot of time, communicating about the innovation strategy, so that it is clear for everybody who wants to contribute.

Indeed, innovation is more than letting a thousand flowers bloom – letting everyone have an idea. If you allow everybody to come up with his or her own ideas, you end up in anarchy. When we talk about innovation, we think about diversity. But coherence in your innovation strategy is equally important! The essential role of senior management is to set strategic boundaries that will give coherence, consistency, and cumulativeness to innovation.[49] But according to Gary Hamel, these boundaries "must grow out of a broadly engaging, deeply creative process of strategic enquiry. They are not invented by a few superannuated divisional directors attending a two-day strategy 'retreat."[50]

A crucial point here is that employees from all levels should be able to discuss and provide input about the innovation strategy. If this is not the case, strategy can never be brought alive. And ultimately, that is what is needed if you want to make strategy work. Once the main boundaries are set, management should also communicate what is expected from the different departments. Management should ask department heads how they have contributed to the innovation strategy, and what departmental initiatives have contributed to the implementation of the overall strategy.

Different teams within the company get information from the market and share it internally at regular moments in time

As product leaders continually push their products into the realm of the unknown, the untried, or the highly desirable, they need visionary skills to foresee the trends of tomorrow. Product leadership demands that companies place big and small bets. And deciding where to place those bets is the challenge. That is why people at the executive staff level pay a lot of attention to outside input. They

listen to the field and go out on visit with ears open to hear what is actually happening. They read whatever information that comes in and discuss it in the group, with the idea of possibly shaping some new directions for the company. The most successful product leaders find ways to quickly narrow their portfolios, and focus on the handful opportunities with the greatest potential to hit big.[51]

For product leaders, continuously scanning the outside world and building market intelligence are core activities. They realize that you cannot build great products and services if you only look inside. Market intelligence pertains to understanding customer needs and preferences, but should be broader than that. It should encompass insights about future needs, market trends, new technology, and other external factors. "That urges organizations to anticipate needs of customers and initiate steps to meet them".[52] The information gathered, combined with the opinions of a diverse workforce (youngsters, newcomers, different backgrounds) and the perception of what is happening in the outside world, will increase the chances of a company to come up with revolutionary products and business concepts.[53]

Intelligence generation is not the exclusivity of the marketing department. Market intelligence is generated collectively by individuals and departments throughout the organization. For example, R&D engineers may obtain information at scientific conferences, senior executives might uncover trends reported in trade journals, and so on. Mechanisms must be in place for intelligence generation at one location to be communicated and disseminated effectively throughout the organization. The important point is that generation of market intelligence does not stop at obtaining customer opinions, but also involves careful analysis and subsequent interpretation of the forces that impinge on customer needs and preferences.

In some cases, product leaders go one step further. They actively engage customers in the R&D or marketing process. Customers help to co-create products or services. C.K. Prahalad and Venkatram Ramaswamy have described this process as follows:

> *"The market has become a forum in which customers play an active role in creating and competing for value. The distinguishing feature of this new marketplace is that consumers become a new source of competence for the corporation […] Some industries have already gone further than others in drawing on the competencies of customers. Consider the software industry, in which companies have moved from testing products in usability laboratories to testing them in customer environments. For example, more than 650,000 customers tested a beta version of Microsoft's Windows 2000 and shared with the software giant their ideas for changing some of the product's features. Many of these customers were even prepared to pay Microsoft a fee to do this […]*
>
> *Internetworking giant Cisco goes even further than that: it gives its customers open access to its information, resources, and systems through an online service that enables Cisco's customers to engage in a dialogue. In this way, Cisco's customers solve the problems encountered by other customers, and each customer has access to Cisco's knowledge base and user community."*[54]

Companies like Harley-Davidson and Bang & Olufsen have set up systematic approaches to collect input from the customer, either via their magazines or through websites. Other companies, such as Lego and Google, create a community feeling among their customers, and build communication networks with the most loyal customers. Customers then become an essential part of the development team as new products take shape and grow.

There is a participative decision-making style in our organization

In the previous paragraphs, we outlined that product leaders ensure that innovation is seen as a competitive necessity. The top management should be personally involved with visioning, launching, steering and coaching innovation efforts. But at the same time, innovation should be a bottom-up process. Product leaders adopt both approaches. These two approaches – top-down and bottom-up – complement each other, but they work in totally different ways. While top-down innovation strategy starts with the vision and the mission, bottom-up innovation is, as Jean-Philippe Deschamps formulates, fueled by ideas and driven by culture.[55] Deschamps has described this bottom-up process as follows:

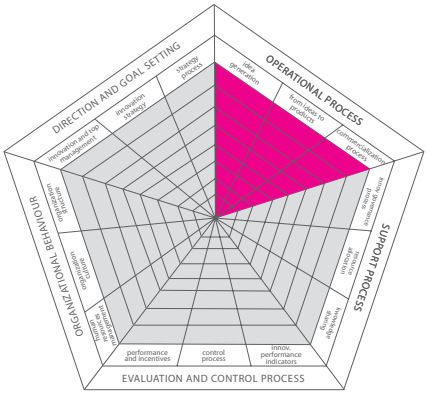
"Bottom-up innovation is fueled by the ideas and initiative of individuals within a company – be they in marketing, R&D, sales, or management. Someone has an idea, which is then pushed through and implemented by the staff, with the strong support of management. This process relies on spontaneous, serendipitous ideas, and so cannot be micromanaged or mandated. However, companies can improve the chances of it occurring by hiring creative entrepreneurs and putting them in an environment conducive to innovation; spotting and supporting good ideas, early on; and establishing idea management and funding mechanisms […] Ultimately, however, bottom-up innovation is driven by a company culture that encourages creativity and entrepreneurship. And such a culture needs to be proactively built by top management."[56]

A crucial part of this innovation culture is the participative decision-making style that we find back with many product leaders. Companies tend to be more innovative when there is delegation of decision making to the lowest possible level of authority. In successful product leader companies, people who make decisions are also involved in the process of implementing the decisions.[57]

A participative decision making style is expected to increase the involvement and commitment to innovate. It also increases the perceived freedom to act and innovate, and it increases the information flow and communication throughout the company. It also reduces the focus on politics and status within an organization. These factors are found to discourage people from innovation.[58]

Operational processes

Operational processes involve all the activities from the creation to the delivery of a product or service. Michael Porter has called this the primary activities, as these activities help to generate the revenues of the company. With product leaders, the following operational processes are most crucial.



1. Idea generation

Management has set up mechanisms for generating and collecting innovation ideas in the entire organization

In the introduction of this section, we outlined that product leaders have developed competences in the processes of invention, product development, and market exploitation. Product leadership starts with generating and collecting innovative ideas within the organization.

Ideas can come from anywhere in the organization. They come from an individual or can be fostered in work groups where people brainstorm and develop a set of suggestions. Encouraging ideas at the grass-roots level is particularly important. The best ideas usually come from those who are closest to the operating details or the market, not from those furthest away. Suggestion programs, planning procedures, and management incentives that reward good ideas sound humdrum, but at the end of the day they work.

> *"Google has set up an internal web page for tracking new ideas. Through a program called Sparrow, Googlers could create web pages with their new ideas. The new idea web page is then posted on the intranet allowing everyone to test it. According to company resources, intranet enabled quiet Googlers who were not vocal about their thoughts in meetings to come out with their ideas and post them on the intranet.*
> *The product development team explored the relevant ideas on the intranet. When selecting ideas, the feasibility and user-friendliness of the idea was given importance, rather than its revenue generating capacity. After ideas were selected, they were brought up for discussion. Every Friday, Googlers had an hour-long session discussing the feasibility of them. Every engineer whose idea was selected was given 10 minutes time to defend it. If he/she was successful defending the idea, then it would be turned into a product/feature, with the project being headed by the Googler who had proposed it"*[59]

While it is important to set up mechanisms for idea generation, it is also imperative that these work productively over time. Management needs to ensure that every single idea deposited in the system is acknowledged and followed up. The company should also show transparency in evaluating and

selecting the ideas and provide clear feedback for those ideas that are not selected. Furthermore, the organization should keep track and publish the results of the idea collection process, such as the number of ideas received and implemented, and the new business or savings generated. These actions show employees that 'idea generation' and innovation is not a one-time event but a way of working within the organization.

The company has a strict 'idea management process' for evaluating, ranking, and selecting innovating ideas

Ideas and business opportunities appear every day. Unfortunately, resources for investment in new products are limited in organizations. Therefore, tough decisions and strict selection processes have to be set in place in order to choose the projects that will be successful in the market and that will bring a considerable return on investment for the company.

> *"Apple has always been considered to be a product leader, investing in high quality and fashionable products. But that strategy has not always been successful. Even in the for Apple disastrous early nineties, the budget spent on R&D was huge compared to the competitors. It was only once Apple had made the shift toward understanding that leadership in the market would come from 'easiness to use' that they truly became a product leader and that they regained the pole position they'd lost."*[60]

Many innovation authors agree that management needs to be involved early in the process of evaluating a new product, service or business idea. They must decide which ideas they should invest in, which they should put on hold, and which to turn down.

The process of idea selection is however not easy. The difficulty comes from the fact that creative ideas cannot be evaluated with the same methods and certainty as other types of management decisions.[61] They cannot be assessed in the same way that most companies analyze investment opportunities, e.g. with detailed justification analysis leading to a single 'go/no go' decision point. They need to go through a process of progressive refinement and risk reduction.

> *"A service company that has successfully implemented an idea management process is the Association for Financial Professionals (AFP) from Bethesda, Maryland. Such a process has helped the company to generate a constant flow of ideas. At AFP all staff members are encouraged to offer input. Ideas are submitted in a one-page memorandum for management review. Such memorandum describes the potential offering; likely markets, possible formats and any known competitors. If the idea is considered interesting, either the idea's originator or an assigned staff member conducts the necessary market research. Subsequently, the selection team evaluates the proposal asking the following questions:*
>
> 1. *Does the market research favor the proposal?*
> 2. *Does the project look like a good strategic fit?*
> 3. *What is the likely impact on operations and other association products?*
> 4. *What resources are required to support the project?*
> 5. *What risks would the proposal involve?*

For larger initiatives, the chief financial officer and product champion prepare a financial analysis detailing the program's costs and projected revenues. The analysis examines the longer-term financial implications: Will the investment result in a revenue growth across time? Would the funds spent on the program achieve a better rate of return if spent elsewhere? AFP uses the expected investment return on its endowment as its discount rate. The association's senior management team uses the evaluation or business case to make a final decision on the initiative. That team includes heads of each of the functional areas that have a stake in the launch: marketing, finance, membership and any other relevant department."[62]

The company actively manages its portfolio of innovation projects

Product leaders need a disciplined approach to objectively analyze potential investments. It is important to note the difference between 'project selection' and 'portfolio management.' Project selection refers to decisions made over individual projects. This means that each project is judged individually and on its own merits. Portfolio management looks at the entire set of project investments and is used to solve the resource allocation process: it is about aligning the company's strategy with two fundamental resources: people and money.[63]

The questions that companies need to consider when managing their portfolio of innovation projects are: Are all projects strategically aligned? What's in the product pipeline? Do we have both incremental innovation projects and radical innovation projects? Is there the right balance of projects? When are we going to get our new release out? Do we have enough people to do it? By answering these questions, organizations will be able to align product roadmaps with the business strategy to increase revenue, grow market share and reduce costs.

Portfolio reviews are usually done by senior management, because they have the power to assign or reallocate resources. As a first step, the reviewers will identify the 'must do' projects. Second, they will select the 'wont-do' projects. The project leaders of such projects will sometimes be given the opportunity to give a quick presentation and defend their project. After such presentation, management will make a 'go/kill' decision. Finally the 'projects in the middle' are evaluated. The aim of this evaluation is to find whether the projects are strategically aligned and to assess the quantity of resources needed. If the project is not strategically aligned it is removed from the list and its resources are redistributed among other projects.[64]

"When evaluating projects in the middle, Kodak uses the following criteria at its portfolio review:

1. *Strategic fit*
2. *Product leadership (if the project aims to be a product leader)*
3. *Probability of technical success*
4. *Market attractiveness (growth, margins)*
5. *Value to the company (profitability based on Net Present Value)*

The projects are rank-ordered according to objective criteria and the resources for each project are displayed. A global evaluation of the whole group of projects is made based in these criteria. Management will decide which projects will go ahead and which ones will be stopped."[65]

2. From ideas to products

The management literature pays a lot of attention to the 'fuzzy front end' of the innovation process, i.e. the exploration part of the innovation journey. But apart from the fuzzy front, product leaders also manage the 'speedy back end,' which is about managing from concept to launch.[66] Innovation is not only about inventing and conceiving new ideas. The new ideas need to be commercialized and turned into financially attractive projects. Many innovation projects are mismanaged in the innovation project development phase. This part of the process is as crucial as the idea generation phase. In the back end phase of innovation, the focus is on getting the product to market fast to reap the rewards.

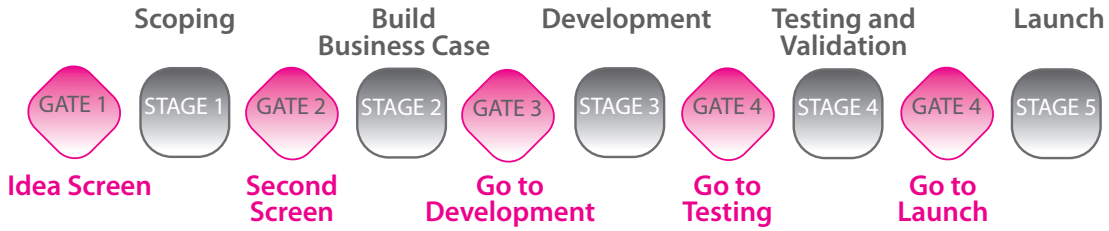
Once ideas are approved, there is a systematic process that helps turn ideas into products and/or services in a very efficient way

After a company has collected ideas and carefully selected the ones that will be part of its portfolio, ideas move to the innovation project development phase. Product leaders have developed a systematic process – a New Product Process – to turn ideas into products or services. This process consists of various steps that each project needs to go through.

> *"To create products with appearance and functionality that made them instantly recognizable, the company had evolved unique design and development processes. Bang & Olufsen gave designers free reign to create new products that would challenge engineers to find a way to manufacture them. New ideas, materials, and technologies made their way into B&O products only if designers put them there […] If an idea had potential, designers created models and brought them to meetings at B&O […] One idea evolved in a sequence of iterations. The process continued, often for a year or more, until the concept had substance. 'Substance means it should have a unique personality. We don't see ourselves as technology or gadget providers; we want to make things that become part of people's lives and are up to our values of simplification, convenience, and quality. Designers might make 20 or even more models before settling on a product form […] No decision was made without designers, engineers, managers, and many others seeing and feeling a prototype.*
>
> *Once a concept had substance, it moved toward product commitment, which was based on much more than a business case. 'The decision is made with the heart. Financial and technical considerations are not the determining factors.' If the decision was 'go', product development assembled a project team to move the product toward launch. Designers remained involved throughout development, consulting with engineers on surfaces or dimensions." Interestingly, the right product was always prioritized over timing or efficiency.*[67]

By setting a rigorous selection process for new products, managers can make sure that no money will be wasted on the wrong projects. This selection process, where the decision to continue or stop with the development of such projects occurs, is called the 'stage-gate® process'. The term was first introduced by Robert Cooper (see Figure 7).

Figure 7 Stage-Gate® Product Innovation Process

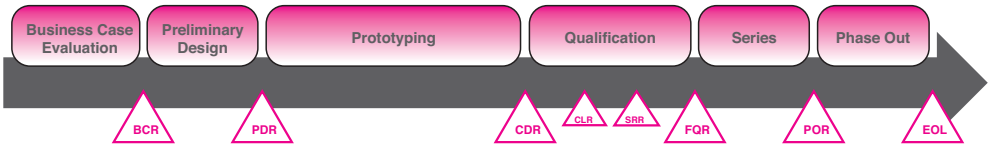


Source: Cooper (2004: 211[68])

Robert Cooper describes the New Product Process or idea-to-launch framework as a 'game plan' to guide new product development from beginning to end. This should include elements such as stage activities, gates, deliverables, gate criteria, and roles and responsibilities.[69] Typically there are five gates for a major project, from the 'idea screening' through to the 'go-to-launch' decision point. One of the objectives of using this process is to spot early those projects that will not be successful once they reach the launching stage. Furthermore, a more structured approach brings discipline to a process that often appears to be ad-hoc. It also provides improved focus via gates where poor projects are killed and efforts can be redirected to more promising projects and products.

The model developed by Robert Cooper is the world's most widely implemented new product development process, although many companies have customized it and adapted it to their own needs and context.

Barco, a world leader in professional display and visualization solutions, has introduced its own version of the Stage-Gate Process. In all Barco's divisions the 'Generic Product Life Cycle' (PLC) has been introduced. The document describes a high-level process for defining, developing, manufacturing and launching products in the market.



The PLC document describes each stage of the process, and the criteria by which the projects are evaluated. It also defines the responsibilities of the people involved in each project and establishes a common terminology and understanding of the core processes. It provides a basis for a sound, documented process definition in the business divisions. Furthermore, it provides grounds for enterprise-wide tooling and education and supports the exchange of process improvements across divisions.[70]

The company appoints a team of technical and business champions for launching new products or services, and project leaders are fully empowered to do whatever is needed to launch the project successfully

In the previous sections, we outlined the importance of both top-down and bottom-up innovation. Innovation should be a top management concern and priority. At the same time, bottom-up innovation

implies that employees not only take the initiative to generate ideas but are also empowered to implement them.[71] Successful innovation is driven by a few champions – both innovators and managers – who are ready to take a career risk and who want to push ahead with their ideas. According to Deschamps, it is imperative to identify, empower and support technical, business and executive champions.[72]

- Technical champions are often found in R&D and engineering departments. They are the ones who keep up-to-date with the upcoming technology and trends. Even though they are not always the initiators of an innovative idea, they will work with the idea originator to develop products that are technically feasible.
- Business champions will identify business opportunities based on an idea or an innovative technical discovery, and will sell the idea to the management and get funding and support for it. Finally they will often volunteer to personally bring the idea forward together with their technical colleagues.
- Executive champions are senior members of the company with the power and authority to support a project. An executive champion facilitates the allocation of human and capital resources to the development effort. He/she will also stimulate communication and cooperation between the different functional groups involved in the development process. Given that adequate resource allocation and cross-functional communication and cooperation is necessary to both compress cycle time and achieve a good fit between product attributes and customer requirements, the use of executive sponsors should improve the effectiveness of the new product development process.[73] Research has indicated that the support of an executive champion improves a project's chances for success significantly.[74]

Successful innovation requires the combined presence and intervention of these three types of champions. In their executive championing role, innovation leaders therefore need to ensure that no project is allowed to go beyond a certain exploratory phase without the simultaneous enrolment and balanced cooperation of a technical and business champion.[75]

There is a focus on quality of execution, where activities in new product projects must be carried out in a quality fashion

Quality is a major driver of market success and profitability of a new product.[76] Therefore, product leaders emphasize the quality of execution of key tasks and activities through the new product process, from idea generation to launch.

Senior management therefore should emphasize quality of execution by stimulating a 'doing-it-right-the-first-time' attitude. Management and project teams must develop a disciplined approach to the production and marketing of new products. Many of the root causes of poor quality of execution include a lack of resources, too many projects, and not enough time or resources to do a quality job. These are areas where senior management can take corrective action. Note also that a disciplined adherence to an idea-to-launch framework should yield better quality of execution standards, and allows for better control of the execution process.[77]

While some managers may get concerned that emphasizing quality of execution adds time to projects, studies have shown that this is not true. Quality of execution is one of the key drivers of cycle time reduction. Taking the time to do a quality job saves time later. As such, product leaders are better positioned to capture first mover's advantages.

"In the mid 1980s, to improve its manufacturing processes, Harley-Davidson (H-D) decided to follow the continuous flow process. To do so, it had to adopt new manufacturing philosophies such as Just-In-Time (JIT) inventory management, Statistical Process Control (SPC) and Employee Involvement (EI) with focus on a highly participative and flexible workforce. Thus began the culture of process innovation at H-D. By implementing JIT at its plants, H-D was able to operate with lower inventory levels […] and improve the quality of its products. SPC also helped immensely in improving quality – it involved using statistical techniques and control charts to monitor variations in manufacturing processes. H-D realized that for SPC to work, the company needed to place the responsibility for quality on the employees who worked directly with the materials at the shop floor. However, H-D had to provide its employees with extensive training in using statistical tools effectively. At this point, H-D realized that to continuously improve the quality of its manufacturing, employees should be willing to learn new techniques. Thus EI was identified as a key issue for bringing about continuous improvement."[78]

"Pixar's employees were totally committed to the quality of the products they were producing. For instance, when they were not satisfied with some parts of Toy Story 2, they re-worked the whole movie despite tremendous time constraints […] Pixar believed in perfecting every detail in every production. Pixar's employees realized the need for a full understanding of the world they were trying to animate. Before every movie, the crew spent enough time trying to grasp fully the nature of the environment and the characters in the production. Analysts felt that this eye for detail resulted in flawless animations that appeared to raise the bar with each new film."[79]

3. Commercialization process

The management emphasizes doing the up-front homework in the process – both market and technical assessments – before projects move into the development phase

In order to ensure that the time-to-market is reduced as much as possible, product leaders ask that innovators have done their up-front homework and have a sharp product definition. New product success or failure is largely determined in those early steps that precede the actual development of the product or service. Up-front activities include initial screening of the market, the users and competition, technical and manufacturing appraisals, and financial analyses.[80] "The up-front homework defines the product and builds the business case for development. The ideal new product process ensures that these early stages are carried out and that the product is fully defined before the project is allowed to become a full-fledged development project".[81] Some questions that should be addressed during the up-front homework are:

- "Is the project an economically attractive one? Will the product sell at sufficient volume and margins to justify investment in development and commercialization?
- Who exactly is the target customer? And how should the product be positioned?
- What exactly should the product be to make it a winner? What features, attributes, and performance characteristics should be built into it to yield a product that will delight the customer?
- Can the product be developed at the right cost? What is the likely technical solution and what are the technical risks here? And how will it be produced and delivered, with what risks, and at what costs?"[82]

While these questions can be answered easily for incremental innovation projects, these questions pose huge challenges with radical innovation projects. Nevertheless, product leaders spend even more attention in the up-front homework for their radical innovation projects. The team in charge of these types of innovations will have to develop a business proposal. A business proposal is a working hypothesis about what the technology platform form could enable in the market, what the market space will ultimately look like, and what the business model will be. On top of that, a prototype needs to be built, and the project will not go further to the next stage until it has been rigorously tested.[83]

Involvement of the customer during the design and product definition has brought rewarding results to companies that have decided to take this path.

> *"As engineering director and unit manager for Logitech's Retail Pointing device, Yves Karcher had the chance to approach a great number of customers in order to collect data for his Executive MBA assignment. The exercise was to perform intensive one-on-one interviews with customers and capture and analyze in-depth feedback on their experiences and needs. The overall goal was to learn the critical issues related to delivering electronic presentations, discover new needs for people who deliver presentations and from this information formulate what would be needed for a new line of presentation devices.[84] The results of the study led to the creation of an innovative presenter with an embedded timer, screen control and more intuitive button design, which gave a boost to the growing revenues of Logitech and gave the company a leader position in the cordless market".[85]*
>
> *Another company that embarked on a similar process was LEGO. "LEGO has released a computer-aided design tool called LEGO Digital Designer, which allows users to create new LEGO toys virtually. After building a virtual toy a user could check the price of the new creation, upload it to the LEGO website, and order exactly those pieces needed to build it. The new service, called LEGO Factory also allowed users to purchase other users' creations. Observing these new models, allowed LEGO's designing team to understand the latest tendencies and tastes of the customers which help them to bring more innovative products to the market". [86]*

The company has developed strong screening competencies that help to broaden and deepen its connections to its markets

A company must not forget to build a close connection with its customers. A passionate and committed customer base is one of the most powerful competences for a firm.[87] Product leaders build deeper connections with their customers to get feedback on their products. In addition, they use them as an extra marketing channel.

> *"In 1916 for instance Harley-Davison (H-D) launched 'The Enthusiast' magazine for its customers. The idea was to provide customers with the latest information on the company's products and on the motorcycle industry. Another way that H-D found to boost its growth was the establishment of the Harley Owner Groups (HOG) in order to create strong relations with its customers. Through HOG, the company organized several motorcycle rallies and tours (at the state and national levels). These rallies*

involved giving customers demo rides, letting them interact with company officials, and selling new bikes and merchandise. H-D thus encouraged customers to use their motorcycles and share 'their excitement of riding'. Over the years, HOG not only served as a primary customer relations tool, but also allowed H-D to promote and demonstrate new products."[88]

"LEGO's first Mindstorms NXT robot kit was released in 1998. Its core was an intelligent brick called the RCX that housed a microcomputer and had several ports that could connect to sensors or motors. Users could program the brick from a PC via a software application to create logical sequences to drive the motors according to information received from the sensors. By 2001, LEGO had sold nearly a million of these kits and created a devoted group of (mostly) adult fans and launched the company into sophisticated electronic products. The fans remained extremely active and enthusiastic on a number of internet sites. This gave an incentive to LEGO which decided to involve its customers in a different way. The management recognized that The Mindstorms NXT was the ideal medium for a team competition. Therefore they started to organize tournaments between schools. These tournaments involved students and teachers who cooperated to design a robot to complete some challenge. As the creative director Hanne Boonstein explained: 'All the school needed, was Mindstorms NXT kit. We then sent them materials of what they needed in the classroom, software for the teachers to use, and parts when needed.' The contest culminated in an international competition."[89]

The company has developed a clear positioning and branding strategy that helps to differentiate its products and/or services from the competitors

An important pillar within the commercialization process is positioning and branding. How many times have we found ourselves in the dilemma of choosing between one brand or another? How many times has the chosen brand been the best known? No wonder why companies invest millions of Euros each year in promoting their brands in order to position them in the mind of the customers.

However, it is important to note that not all companies build their brands by investing in advertising. Companies such as McKinsey have managed to build their brand without advertising. What these kinds of companies do is relying on their 'product as its own spokesman', making the product or service they offer 'one of a kind'.

"In 1939 and 1940 the firm struggled for its existence and was happy for clients of any size and any reputation that was not negative […] After some important successes, McKinsey gained momentum and was able to make important choices about clients that both resulted from and contributed to the firm's continued success […] Even while struggling to attract prestigious clients during the early years, McKinsey stood fast to its refusal to advertise its services. 'One of the best ways to establish management consulting as a profession is to emulate the older professions. Leading law and accounting firms do not solicit clients, nor do we.' Nevertheless, McKinsey needed to make its name more widely known and adopted 'an organized program of professional exposure' to do so."[90]

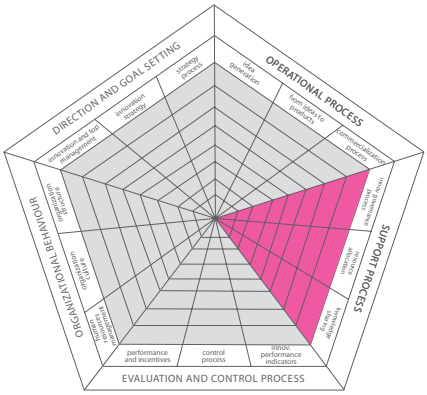
Product leaders also build a strong network and make alliances. They create relations with companies that are part of the supply chain. By doing this product leaders make these allies part of the growing company. They think together about ways of achieving mutual benefit, and therefore will advertise each other.[91] Finally, product leaders also pay attention on developing appropriate distribution channels with the right sales people, because they ensure that the product or service is sold in the right environment where the right message gets to the customer in the right way.

Many companies strive for positioning and branding. The ultimate goal is to make their brand a synonym for a certain product: 'TomTom' means navigation system, 'Gillette' means quality razors, 'Bic' means quality pens.

> *Logitech's reputation in the market place has been built on its expertise in the mobile computing peripherals market and its name has become synonymous with award winning mice, keyboards and wireless presenter devices, which use the latest cutting-edge technology.*[92]

> *"B&O sells its products through exclusive B&O retail outlets staffed by skilled salespeople who could explain complex and subtle product features; no longer would B&O appear on shelves alongside mass market products."*[93] *Furthermore, B&O traces the dialogue with the 2 million customers through an advanced CRM system. "Customer loyalty is high; 25 to 30 percent of our revenues come from existing customers. Many of them have followed us for years. People usually keep their B&O product for a long time and eventually buy more. Of course we must continue to live up to their expectations."*[94]

Support processes



While operational processes create, produce, and deliver the products and services that customers want, support processes help to improve the effectiveness and efficiency of the operational processes. They do not produce output for external customers, but are necessary to running the business. Support activities include purchasing and procurement, technology development (to improve the products and the processes), finance, accounting, legal and governmental affairs, etc. Product leaders typically have set up an innovation governance process and particular resource allocation processes. Furthermore, product leaders pay significant attention to the role of knowledge management.

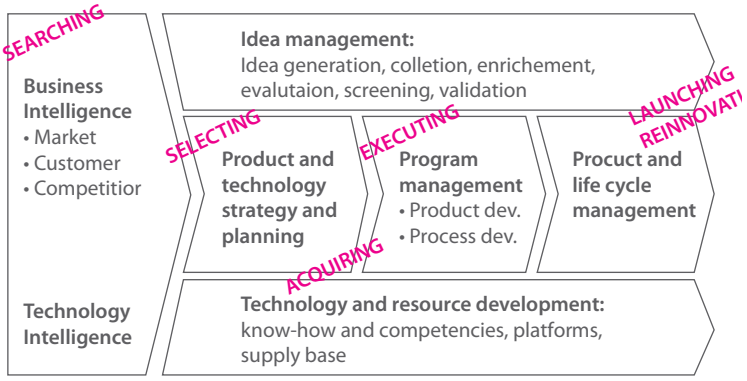
1. Innovation governance process

Our entire innovation process is described and is audited at regular time intervals

"Mastering the overall process of knowledge creation, dissemination and application is the basis for creating and continuously improving a capability in product development".[95] Product leaders do not launch one product successfully; they build capabilities to continuously launch a stream of new products over many years. That requires learning through sequences of unique innovations. This is neither simple nor natural, but requires adequate enabling mechanisms to overcome them. "Therefore, it is important for firms to gain technical knowledge from a new product development project and to use that knowledge in subsequent innovation projects."[96]

Senior management has to consider innovation as a process, and not as a unique event. Product leaders put a structure in place that guarantees an efficient and effective new product development process. All this starts with having a picture of the entire innovation process, as presented in Figure 8.

Figure 8 Innovation Process



Source: Deschamps (2008: 103), Tidd et al. (2005: 68)[97]

Figure 8 indicates that new product development is not only about R&D, but is everybody's responsibility. Therefore, innovation managers should see the entire process and should be allowed to take actions across the entire process. It helps to allocate clear responsibilities for each part of the process, and to identify inputs, process activities, and outputs associated with each process part. Furthermore, it allows companies to measure the performance and contribution made at each step in the process.[98] In other words, the entire innovation process can be audited.

Auditing means that one can assess the maturity of each step of the innovation process. Managing the maturity of different types of processes is 'in', and both consultants and academic institutions have developed maturity tools to assess how well developed processes are. A maturity assessment of the innovation process helps to improve the effectiveness of the overall process. Cross-project learning can be enhanced if project reviews are organized that capture lessons as to the processes and procedures that have been (less) successfully used. These lessons should be shared through social networks so that project members can make use of the knowledge that is gathered and benefit from the expertise of other innovation managers.[99] Post-project review is a necessary tool for continuous improvement. But it only is useful if managers are committed to organizing meetings and reviews and then do something with the lessons learned.[100]

> *"Harley-Davidson (H-D) believed that New Product Development (NPD) was not just about engineering, but a creative process where consistency in approach was critical. The company also believed that technology should be used to fulfill this creative process. To make this process easier, H-D used an NPD methodology to ensure consistency in actions (defining the who, when and how of NPD), provide a mechanism for managing the risks of NPD, establish a common language and terminology for managing NPD, define interface points for the community, and foster organizational learning by capturing and measuring repeated activities over time. In the late 1980s, H-D established the Concurrent Product & Process Delivery Methodology (CPPDM), through which it delivered products and services."*[101]

The company has an innovation steering team that overlooks the innovation initiatives in the company and allocates specific process ownership and responsibilities to dedicated coaches

Product leaders create innovation steering teams that overlook the various innovation initiatives in the company. Those innovation steering teams should consist of senior managers. Without clear senior management commitment and encouragement innovation activities will lack a sense of importance and urgency.[102] An innovation steering team gives a real boost to the innovation process, as is demonstrated in the following example.

> *"Alcatel-Lucent went through a major restructuring in 2002. One of the key principles was to motivate employees in the company to focus on innovation and to make it a responsibility for everybody in the organization. In order to achieve this, Alcatel-Lucent formed the Innovation Board, composed by the top managers in the company from different divisions. This action sent strong positive signals to the organization about the top management's desired emphasis on innovation and its commitment to the initiative. Meetings are carried out every month and chaired by the CEO of the company. Their aim is to analyze the ideas and business opportunities proposed by the employees and to allocate process ownership and responsibilities to dedicated coaches".*[103]

As in the Alcatel-Lucent case, the innovation steering team allocates specific ownership and responsibilities to dedicated coaches. Process owners will typically be distinct and dedicated individuals, responsible for developing the process (if it does not already exist), documenting it, mobilizing the whole organization behind its implementation, supporting it and improving continuously. Process coaches are expected to empower process owners, i.e. give them the necessary authority to intervene in the areas beyond their own organizational boundaries. They should audit the process, supervise and support improvement initiatives. Process coaching tasks can be allocated either to individuals or cross-functional 'bodies', which then become collectively accountable for the processes.[104]

We check whether competencies and tools are available for each part of the process

Product leaders place bets, big ones and small ones. Deciding where to place those bets is the challenge. Product leaders therefore need to continuously shift resources to the project or market where the action is.[105] Management must decide which projects to pursue and how many resources to assign to each. Usually these opportunities are evaluated for economic feasibility and then the favourable ones are pursued.

Several questions arise regarding the allocation of available resources to the approved projects. In which order should the projects be carried out, or should they be done concurrently? How many resources should be assigned to each project? Management then should weight numerous factors, such as urgency of the project, required skills, competence and availability of staff and the impact of resource levels on delivery schedules, in determining the allocation of resources.[106]

Resource allocation involves both financial resources and human resources. The latter is particularly important, but is a complex issue, since the personalities and abilities of people must be evaluated and taken into account. Methods for optimally allocating human recourses have yet to be developed and put into practice. Human resource allocation decisions are usually made according to the experience and intuition of project managers. However, as the content of the projects becomes more complex and the required abilities to carry them out more diversified, there is an increasing need for logical support systems to assist decision makers when seeking the best possible deployment of the human resources.[107]

2. Resource allocation

There is a systematic process in place in our organization for funding and programming innovative projects

Product leaders seek to fund projects that will bring them high returns. Unfortunately, the resources and the capital to do so are limited. Management needs to develop a systematic process for choosing and funding innovative projects.

> *An example of an effective process can be found with Procter and Gamble. "The venture capital board at P&G is called the Innovation Leadership Team (ILT). It comprises the corporation's chief executive, the chief of technology officer and one of P&G's seven global business unit presidents. Each member is very senior and highly experienced. This standing group meets to consider various proposals for funding. Its role includes*

authorizing financial support and incubating services, and providing counsel.
The ILT's investment fund comes from the business units through an imposed tariff, a mechanism that promotes competition to win back the money drawn from each unit's operations. The business units have been extremely creative in working 'to get their fair share, and to keep their existing organization intact.' The result: 'the business units are already actively involved in sorting out whether (a given) incubator project has any potential.'

Funding for P&G venture projects comes in three phases: early seed funding, then first-phase funding to develop a testable prototype and lastly, additional funding to take the idea to a learning market. Once ventures reach that point, they rejoin a business unit and the ILT provides no additional funding.
The ILT maintains a portfolio of approximately 30 projects. All show 'good consumer insight' and 'meet some particular market thresholds.' The ILT asks it portfolio analysts to compare projects on the 'relative level of risk involved both from a technical as well as a marketing point of view,' saving the higher risks levels for projects with significant potential. Each project is also considered in the context of the current portfolio, so those with lowest potential could be dropped in favor of the new venture with the possibility of better returns."[108]

R&D spending in the company is above industry average, and there is a process in place for funding innovative ideas from within the company

Product leaders recognize that continuously developing new products is key in order to develop and sustain a competitive advantage. Therefore investing in R&D and new product development is a 'must' when preparing the yearly profit plan. The goal of some companies (such as 3M and Henkel) is that new products would generate at least 25 percent of the yearly revenues, although this figure varies from industry to industry.

Televic, the Belgian manufacturer of a range of high-quality products and innovative solutions for specialist multimedia and communication markets, has more than 80 percent of its revenues coming from products which are not older than one year.

Whatever the figure, product leaders ensure they invest more than their competitors in R&D.

"During 1985 and 1986, Grove, who succeeded Noyce as Intel CEO, closed seven factories, abandoned several businesses, and cut head count by one-third. Intel, however, maintained its commitment to research activities. R&D and capital expenditures together accounted for 30 percent of revenues in 1986."[109]

L'Oreal believes that diversification and innovation are its critical success factors. As a result of this each year the company devotes 3 percent of its turnover to Research and Development work. It invests heavily in research and development and recovers its investment by globally launching its new products. L'Oreal tries to introduce one or two new products every year in each of its worldwide markets.[110]

Similarly, 3M decides to invest 5 percent of its sales in R&D every year to encourage the development of new products.

Barco, the leader in manufacturing of projectors in Belgium invests 7 percent of its revenues in the R&D department of its Presentation and Simulation Division. They invest similar amounts in the other Divisions (Medical and Imaging Division, Media and Entertainment Division and Security and Monitoring Division).[111]

The appropriate people are put in place and have their time freed up for new products

As it was mentioned earlier, ideas can come from anywhere in the organization and it is a management duty to encourage employees to come up with innovative suggestions. Some companies go one step further and ensure that employees have time available to work on their ideas and develop them as business propositions.

"Google employs an idea management system whereby employees can e-mail ideas for new products, processes and company improvements to a company-wide suggestion box. This box is reviewed regularly by a team that pre-evaluates the ideas and whenever they see a potential one, they send it to the experts for further evaluation. As ideas for new products are mostly generated by employees, Google allows technical employees to work 20 percent of their time on a project of their own choosing while the rest of the time is focused on core activities. Google takes this into account at the moment of making the annual budget. It considers that employees will be working only 80 percent of their time in what is stated in their job description."[112]

"3M uses the 'rule of 15 percent'. Employees are allowed to spend 15 percent of their working hours on independent projects. 3M gave its employees the freedom to conduct research in areas of their choice even if that research was not related to their official projects. By nurturing the talent of their employees and fostering a climate of innovation, 3M became one of the most innovative companies of the world."[113]

In most organizations innovation is seen as the province of specialists in R&D, marketing, design or IT. In product leaders the underlying creative skills and problem-solving abilities are possessed by everybody. If mechanisms can be found to exploit these creative and problem-solving abilities on a regular basis across the entire company, the resulting innovative potential is enormous. Although each individual may only be able to develop limited, incremental innovations, the sum of these efforts can have a far-reaching impact.[114]

"An engineer at Google says: 'In my first month at Google, I complained to a friend on the Gmail team about a couple of small things that I disliked about Gmail. I expected him to point me to the bug database. But he told me to fix it myself, pointing me to a document on how to bring up the Gmail development environment on my workstation. The next day my code was reviewed by Gmail engineers, and then I submitted it. A week later, my change was live. I was amazed by the freedom to work across teams, the ability to check in code (submit workable programs) to another project, the trust placed in engineers to work on the right thing, and the excitement and speed on getting things done for our users. I didn't have to ask for anyone's permission to work on this.'"[115]

3. Knowledge sharing

The company ensures that the flow of communication within the company is intense, and that people have access to relevant information

Currently it is a common exercise for organizations to establish practices that are aimed at retaining project knowledge and leveraging it in other projects. Typically theses practices involve project reviews where project members are asked to capture the learning that has taken place on the project. Most often these reviews are done at the end of the project.[116] Once the learning has been captured through the project review process, the results are then stored in databases that other project team members can access. These databases are typically computer-based and can be accessed via the corporate intranet. Knowledge management thus avoids project reinvention and increases the efficiency of the product development process.[117]

The flow of information is not only restricted to best practices, but also involves customer, market and competitor information. Ideally, the data is available for all employees in the company.

> *"Thanks to Whirlpool's vision of 'Innovation from Everyone Everywhere', employees posted their innovative ideas, not only for the development of products and services, but also for the creation of processes and systems that fostered innovation throughout the organization. As a result, a Knowledge Management (KM) system was created to capture the company's huge data resources and was made accessible to a large number of people in a protected, productive and interactive environment, in order to enhance people's ability to innovate. The action plan was drafted in 2000, consisting of four phases for effective implementation of the Knowledge Management system. First, the company had to identify the reason WHY such a global, dynamic and innovative company had to synchronize data collection and distribution. Second, an accurate analysis of the cultural, organizational, managerial and technical environments was carried out in order to identify WHAT was needed: information regarding which knowledge and subjects areas had to be collected or at least what was the level of priority. In the third phase HOW a real sequence of activities is to be performed was defined, which were the sharing and interaction tools that the company staff could use in a fast and effective way. The fourth phase defined WHO were the main providers of information and who were the users at a global level, which was their knowledge sharing process and to what extent improvements could be made. By January 2001, 15.000 employees were exposed to the platform and in 2002 Whirlpool's 'Knowledge Management' site recorded 3.000.000 hits per month."*[118]

Knowledge management systems often fail because they have a reputation for being costly to set up and to maintain. One of the key issues is to get everyone to contribute. This is a lot of hard work as it may include writing down what is currently only in their minds, formatting it into a state where it is useful to others and inputting it into the system. However, it is important to note that the value of knowledge systems is in the knowledge they contain and the time, effort and expense they can save for their users. Communicating not only means sharing ideas but also sharing the lessons learned from successes and failures. Ways to enhance communication include more inclusive meetings, better online tools for sharing knowledge, cross-functional assignments, and brainstorming sessions.[119]

Communication also includes storytelling: telling both inspirational and cautionary tales. “After all, stories about why ideas fail might be as valuable a source of learning for businesses as stories about success”.[120]

> *“In July 2006, US-based McKinsey & Company (McKinsey) earned recognition as one of the companies committed to growth through innovation and managing enterprise knowledge to create intellectual capital. McKinsey figured in the Most Admired Knowledge Enterprises (MAKE) Report 2006, published by Teleos. McKinsey was also inducted into the Global MAKE Hall of Fame for being a Global MAKE finalist for five years in a row. On McKinsey, the MAKE report wrote, ‘McKinsey & Company, founded in 1926, is perhaps the most knowledge-oriented firm within the global management consulting industry. McKinsey is not the largest consulting company in the world (US$ 3.5 billion in annual revenues and 10,000 staff working in more than 80 offices in 44 countries), but it is among the most profitable and many consider that it has the strongest brand image. McKinsey & Company spends at least 10 percent of its annual revenues on managing and sharing […] McKinsey was largely successful in its efforts to proliferate knowledge across the organization with the use of databases and also by encouraging employees to share knowledge. It focused on exploring knowledge from internal and external sources as well as on distributing and utilizing this knowledge. McKinsey also encouraged sharing of tacit knowledge through personalized knowledge sharing.”*[121]

The company organizes events that allow technical and business specialists to meet each other

“Explicit knowledge is knowledge that can be codified, such as simple software code and market data. When a company’s employees rely on explicit knowledge to do their work, the people-to-documents approach makes the most sense. Tacit knowledge, by contrast, is difficult to articulate in writing and is acquired through personal experience. It includes scientific expertise, operational know-how, insights about an industry, business judgment, and technological expertise. When people use tacit knowledge most often to solve problems, the person-to-person approach works best”.[122]

> *“In addition to providing an environment that stimulated innovation, 3M took steps to encourage knowledge sharing among its employees. According to analysts, innovation could flourish in 3M because the management encouraged its employees to talk. 3M employees never experienced any communication barriers. Employees were free to communicate across departments and share ideas. In 3M, the tradition of story telling was encouraged. It was believed that success stories would fire the imagination of employees and result in the generation of innovative ideas. 3M also encouraged openness and cooperation among various divisions to foster innovation. In addition, 3M established forums to encourage employees to share ideas and knowledge.*
> *In 1951, The Technical Forum was set up to encourage 3M’s technical staff to share ideas and technologies. In order to introduce its employees to new technologies, 3M invited Nobel Prize winners to forum meetings to discuss their research finding. The Technical Form also conducted problem solving sessions, at which business divisions brought their unsolved technical problems in search of solutions. In addition, the Technical Forum held annual exhibitions at which all 3M divisions could set up their stalls*

to showcase their latest technologies. It also brought together scientists from different disciplines and formed them into groups so they could share their knowledge."[123]

Such events as described in the previous paragraph give the company the opportunity to bring in the same room engineers and R&D employees together with their colleagues from marketing and sales. These gatherings will allow the two types of co-workers (technical and business) to share ideas and perspectives on new technologies and business opportunities. The goal is to align ideas in such a way that the ultimate product is feasible to be developed by the R&D department and to be marketed and sold without problems.

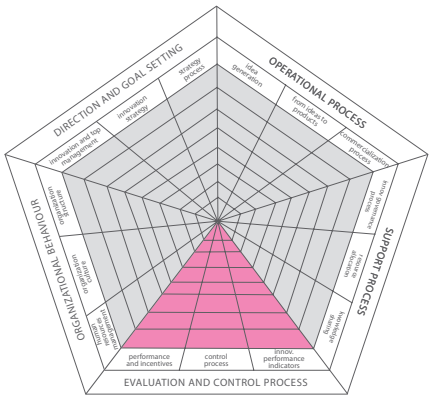
The company fosters external networks across the company

In a world of widely distributed knowledge, companies cannot afford to rely entirely on their own research. A number of initiatives have been taken by companies to reach beyond their own walls and to use talent and ideas from outside. During the latest years, the concept of 'open innovation' has become increasingly important. Open innovation enables companies to be able to respond in a quick and flexible way to changes in the environment and to remain competitive despite the shortening time-to-market and life cycles of products and technologies.[124]

An organization's external network is as important as its internal network for its daily business life and competitiveness.[125] Such external networks encompass a firm's set of relationships with other organizations – be it suppliers, customers, competitors, or other entities – including relationships with firms across industries and countries. "Communication networks and involvement with suppliers and customers facilitates innovation".[126] And the sharing of market information in the organization enhances market responsiveness. "A formal intelligence dissemination procedure is obviously important, but the discussions with managers indicated that informal 'hall talk' is an extremely powerful tool for keeping employees tuned to customer needs."[127]

Evaluation and control processes

Evaluation and control processes are designed to ensure that the organization is performing as planned. These processes detect perturbations, initiate corrective action and restore the organization to its previous equilibrium. Innovative organizations adapt their evaluation and control processes to reward creative behavior. What this means is explained in the next paragraphs.



1. Innovation performance indicators

Measurement systems are essential tools for managers. Strategy-focused organizations use performance measures to define and communicate the strategy and to monitor strategy execution.

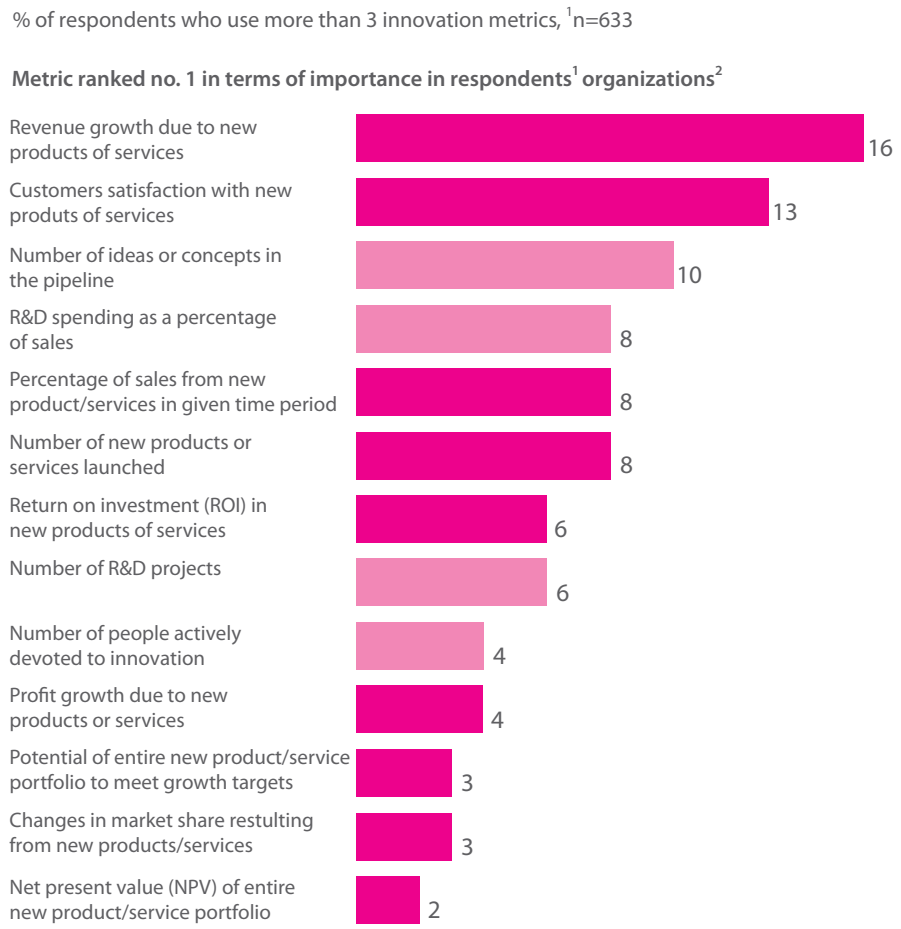
The company tracks and measures how well we performed on new product/service development over time

"Performance measures are a common control mechanism. They communicate desired outcomes or behaviors to employees and are used to evaluate success in achieving goals".[128] Strategy-focused organizations link their performance measures to the company's strategy. Companies following a product leadership strategy therefore pay special attention to the performance of their innovation efforts. Many organizations use financial metrics to measure a company's performance. However, non-financial, operational performance measures are equally necessary to manage an organization successfully. These non-financial measures give a better real-time, rough evaluation of progress and likelihood of success.[129]

"Clearly, companies have many options when trying to measure innovation. Their choices will depend on their industry, their experience at using such measures, and their ability to make each measure as accurate as possible."[130]

According to a study carried out by Mc Kinsey, companies reporting the highest contribution to growth from their innovation projects tend to be more interested in perusing and measuring their innovations as a portfolio and therefore use metrics across the whole innovation process. The companies that participated in McKinsey's study pointed out that they use about 8 metrics on average.[131] The most common measures mentioned by the executives of these companies are shown in Figure 9. It is interesting to see that most of the metrics cited by executives are outcome metrics rather than input or performance metrics.

Figure 9 Innovation performance measures



[1] Respondents who answered "other" are not shown
[2] Metrics ranked no 1 by less than 2% of respondents are not shown

Source: McKinsey (2008: 4)[132]

"At companies that track the relationship between shareholder value and spending on innovation, the three most important metrics are all externally focused: revenue growth, customer satisfaction, and the percentage of sales from new products or services. At companies where innovation is the most important strategic priority, the top three metrics are a somewhat more comprehensive mix: customer satisfaction, the number of ideas in the pipeline, and R&D spending as a percentage of sales. Some companies also asses the number of people actively devoted to innovation, the number of new ideas sourced from outside the organization and the percentage of innovations that meet their development schedules".[133]

> *"In the late 1970, 3M realized that with increasing competition in the global business environment, it had to accelerate its rate of innovation to sustain its competitive advantage. In 1977, 3M launched the 'Challenge 81' a program that aimed at achieving*

25 percent of the company's annual sales from products that had been in the market for less than five years. This 25 percent was stretched to 30 percent in the 1990s and the total years in the market were reduced from five to four."[134]

"At the Presentation and Simulation Division at Barco, the percentage of revenues coming from products no older than two years in 2008 amounted to 67,19 percent, which is a significant part of the total."[135]

The company tracks and measures different aspects of the innovation process within our company

In order to measure the innovation process throughout the organization, it is important to set a number of performance indicators for the different parts of the innovation process. Davila, Epstein, and Shelton use an input-process-output model for innovation and suggest performance measures for each phase.[136] Here are some of their major recommendations.

Inputs are the resources devoted to the innovation effort. "Possible inputs include tangible elements such as people, time, money, equipment, office space, but also intangibles such as motivation and company culture."[137] The number of ideas submitted by the employees and the percentage of new products based on these ideas is a common input measure. Other measures include:

Typical input measures include:

- Number of ideas and concepts in the pipe line;
- R&D spending as a percentage of sales;
- Number of R&D projects;
- Number of people actively devoted to innovation.

Process measures "track the progress towards the creation of outputs. Process measures are critical during execution because they can signal the need to change course or alter the execution. Product leaders measure both the efficiency and effectiveness of the creative process and the project execution". [138]

Typical process measures include:

- Cost performance indicators;
- Schedule performance indicators (they show if the project is on target concerning lead time or whether the company has spent more time to finish it than initially planned);
- Number of key technical characteristics linked to the customer specifications.

Output measures "describe what the innovation efforts have delivered. Output measures describe whether the company has superior R&D performance, more effective customer acquisition, or better customer loyalty".[139]

Typical output measures include:

- Revenue growth due to new products or services;
- Customer satisfaction with new products or services;
- Percentage of new products/services in the portfolio;
- Percentage of sales from new products/services in a given time period;

- Number of new products or services launched;
- NPV of the entire product/service portfolio.

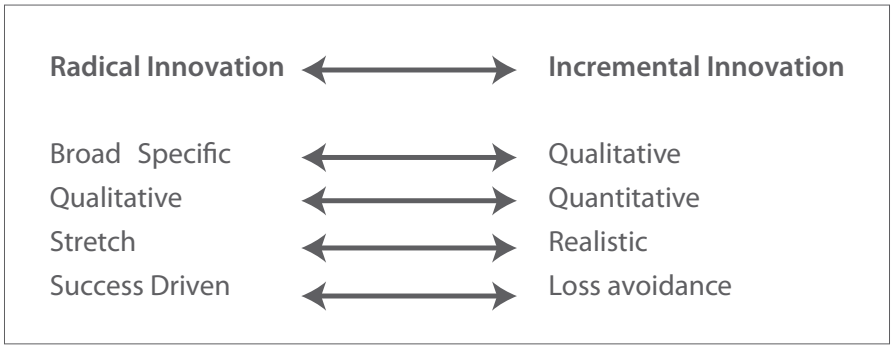
We use different performance measures for tracking incremental innovation projects and radical innovation projects

The typical product development pipeline of a firm consists of different projects at different stages of their life cycles. Some projects focus on incremental innovation, others involve radical innovation.

When measurement systems are not tailored to the portfolio's mix of incremental and radical innovation, managers lose a key source of information. That translates into lower performance and decreased payoff from innovation investments.[140] Although radical innovation can bring in generous financial profits, the largest percentage of revenue is still more likely to come from incremental innovation. Balancing efforts to capture the advantages of both can be a wise but challenging goal for organizations to pursue. Some experts contend that the best way to sort through multiple options in the pursuit of innovation is to create a defined portfolio of innovation approaches (see also our 'Direction and goal setting' section).

Davila and his colleagues have listed the major differences between monitoring radical and incremental innovation projects (see Figure 10). These authors argue that the goal-setting in radical innovation is different than in incremental innovation. Consequently, the performance measurement system needs to be different as well.

Figure 10 Goal setting for incremental and radical innovation projects



Source: Davila et al. (2006: 190)[141]

Goals for incremental innovation should be specific and managers will not need to intervene unless there is a significant deviation. These goals are usually quantitative, such as time-to-market, level of resource consumption and incremental changes in product performance. Furthermore, incremental innovation projects should have goals that are clearly achievable and realistic. Finally, loss-avoidance goals are usually tighter for incremental innovations where the margin to redefine a project is smaller.[142]

On the other hand, radical innovation requires experimentation, trial and error, openness to new ideas, and exchange of knowledge. This is only achieved by setting broad goals that allow flexibility.

These goals generally use more qualitative criteria because of the inherent uncertainty. By relying more qualitative goals, management ensures that there is enough room for experimentation in the organization. Moreover, goals are 'stretch goals'. They demand more than most people would consider to be easy or even realistic to attain. This makes the goals inspirational, and the people involved feel as if they are part of something special. Ultimately, radical innovations, because of their inherent uncertainty and the larger payoffs if successful, have more slack in their loss-avoidance goals.[143]

2. Control process

Management's focus is on actions and projects that have a long-term impact

Earlier we explained the link between management commitment and successful innovation. In particular, there is a need for long-term commitment to major projects, as opposed to seeking short-term returns.[144]

Since innovation is about dealing with uncertainty, it follows that returns may not emerge quickly and that there will be a need for 'patient money'. This might not always be easy to provide, especially when demands for shorter-term gains by shareholders have to be reconciled with long-term new products development plans. One way of dealing with this problem is to focus not only on returns on investment but on other considerations like future market penetration and growth.[145]

In order to become a product leader, management should have a long-term vision for the company and therefore judge individual proposals on their contribution to that vision.

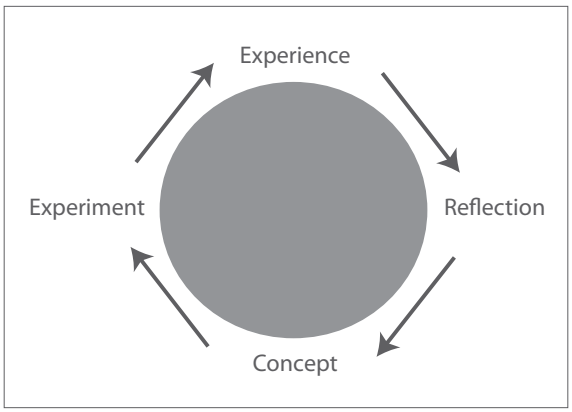
> *"A clear example of this is Alcatel-Lucent, whose 'entrepreneurial boot camp' brings together people and ideas with the aim to develop and defend a Business Opportunity Plan in front of a jury. This jury is formed by the innovation board (top management from different divisions) and external venture capitalists. What is it expected form this boot camp, is to develop ideas that will bring business to Alcatel-Lucent within the 3 to 5 coming years but that will also bring amounts ranging between €50 to €100 million in revenues. Management assesses these business plans taking into account the long-term impact. They are not interested only in actions and projects that have a very short-term impact."*[146]

The company's control systems are not only used to control but also to learn and experiment

In fast-changing environments, the ability to learn faster, better, and more cheaply than your competitors could mean the difference between retaining market leadership and barely surviving.[147]

Companies have started to audit themselves in comparison with other companies, and also again ideal-type or normative models of good practice. "In each case the purpose of such auditing is not to score points or win prizes but to enable the operation of an effective learning cycle through adding the dimension of structured reflection. The aim is not simply to collect data but to use these measures to drive improvement of the innovation process and the ways in which it is managed".[148]
The key to learning is not to avoid making mistakes but to learn from them. In quality means, they call this 'double-loop learning.' It is about learning whether you do the right things, rather than doing the things right.
All of this suggests companies should undertake review actions of innovation projects. This can be based on the model, presented in Figure 11. Learning requires:

Figure 11 Learning to manage innovation



Source: Koble and Fry (1975)[149]

- "Structured and challenging *reflection* on the process – what happened, what worked well, what went wrong, etc.
- *Conceptualizing* – capturing and codifying the lessons learned into frameworks and eventually procedures to build on lessons learned.
- *Experimentation* – the willingness to try and manage things differently next time, to see if the lessons learned are valid.
- Honest capture of *experience* (even if this has been a costly failure) – so we have raw material on which to reflect."[150]

Many organizations don't progress as fast as they want because their people repeat the same errors leading to feelings of frustration. The key to organizational learning is to have systems in place that enable people to learn better and faster. You can often tell that organizations suffer with innovation learning disabilities after seeing several symptoms. They are disbelievers in the effectiveness of innovation: they stumble on execution of innovation projects, favoring only incremental innovation, and they are constantly amazed that others invest in innovation at levels higher than theirs.[151]

Management allows the opportunity to use business reviews and planning meetings not only for evaluating past and future performance but also as forums for discussing innovative ideas

Running business review meetings takes leadership, not mere management. The purpose of the review meeting is to analyze results, identify problem areas, engage in team problem-solving and devise action plans. However, review meetings are not usually used as a forum for discussing innovative ideas.

Innovation leaders instinctively create an environment that values the search for opportunities and the generation of ideas to exploit them. Therefore, it is management's responsibility to come up with fast decisions in order to start implementation. This is why management cannot afford to leave the discussion and evaluation of new ideas at the bottom of the to-do list. Business reviews and planning meetings should be considered privileged forums for discussing and detecting new opportunities, and not entirely for discussing operational day-to-day activities.[152]

The management should let people know through actions as much as with words that the purpose

of the review meeting is not just to analyze performance, but also to act strategically, to think how to remove obstacles and to discuss innovative ideas and identify market opportunities.[153]

3. Performance and incentives

It is company policy to rigorously assess performance of the employees on innovation

An impartial and reasonable performance evaluation can motivate employees to perform better.[154] However, measuring innovation productivity is not always straightforward. Management authors recommend to "use teamwork measures, for instance whether the project is on time, on budget, or on specifications. It is not feasible to evaluate [R&D and design] employees' individual performance only with a quantitative approach. Their performance is related to their expertise, originality, attitude, collaboration, leadership, and enthusiasm. The evaluation of these sorts of attributes is usually done by using more subjective measures. The measurement may be with semantic differential scales such as 'very poor', 'poor', 'average', 'good', and 'very good', rather than with a quantitative number."[155] The team leader thus may evaluate the performance of each of his or her team members or use a 360 degrees evaluation mechanism, where the people who work with a person evaluate him/her.

Intel realized that it needed a cost effective, timely and efficient mechanism that:

- *measured performance and development of employees,*
- *assisted in optimizing training funds,*
- *developed leaders who inspired and motivated employees,*
- *reduced turnover,*
- *improved total productivity, and*
- *identified which developmental investments yielded the highest returns.*

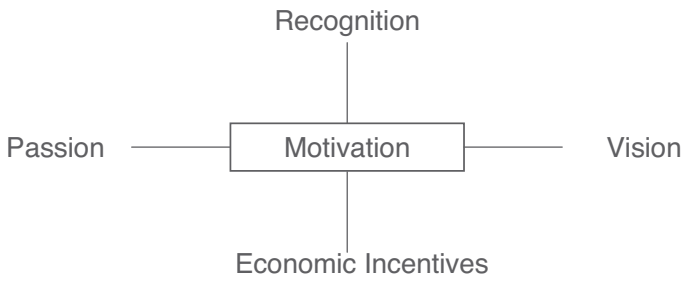
"Intel believed web-based 360-degree feedback evaluations provided a more realistic assessment of individual performance than a feed back from a manager. The relationship that each individual had with their peers and subordinates might be very different than their relationship with their manager. Individuals' perception of their own performance might also differ from their co-workers' perception of them. Gathering feedback from each of these sources enables individuals to develop a more balanced and representative view of how their performance was perceived."[156]

The company recognizes and rewards innovators and successful projects at all levels

Incentives and rewards are some of the most powerful management tools available to create an innovation culture. Organizations can opt for different types of incentives. Most companies immediately think about financial incentives. Management expert Peter Drucker, however, observed that knowledge workers do not so much respond to financial incentives. Drucker writes that the key to managing these workers is to treat them as people whose motivation comes largely from within.[157] Other experts agree: "Companies focus too strongly on providing employees with extrinsic rewards such as bonuses, and risk destroying employees' intrinsic motivation."[158] When innovation and creativity come into play, employees feel more motivated by the recognition of their achievements. This recognition in turn, increases their passion on the work they do.

Davila and his colleagues provided us with a helpful scheme that outlines the major drivers of motivation (see Figure 12). According to these authors, people engage in (innovation) activities if: (1) they are passionate about it, (2) if there are expected incentives associated with (innovation) activities, (3) if they trust that they will be appropriately recognized, and (4) if the organization has a clear vision that provides a clear sense of purpose where 'discovery' plays a central role.

Figure 12 The four elements of motivation



Source: Davila et al. (2006: 190)[159]

Thus, economic incentives are only one element driving the motivation of people. That is why Deschamps argues that if there are any rewards of monetary nature, for example a bonus or a premium for savings achieved, they can be modest. It is the reward element itself (the recognition) that is as important.[160]

Leading organizations that drive innovation through rewards and recognition first address the basic principles of encouraging specific behaviors.

- "Consistently acknowledge those who contribute ideas, knowledge, and time. Senior management may recognize innovative design teams and champions, whereas peers typically nominate and recognize teammates for their contributions to the overall effort.
- Provide special recognition to volunteers, change agents, and model innovators. Keep names associated with contributions.
- Disseminate success stories concerning invention of a successful new product or approach.
- Make innovation self-rewarding. It is important for employees to be perceived as an 'expert' by peers and management.
- Link innovation to the core cultural values of the organization. Explain the justification behind rewards and how meeting goals will affect overall and individual outcomes.
- Compile a committee of human resources, knowledge management, research and development, and representatives from business units to develop guidelines and suggestions to encourage innovation."[161]

It was mentioned before that innovation is not a responsibility solely of the R&D department. Idea generation comes from anyone in the organization and therefore must be recognized and rewarded fairly throughout the company. Many product leaders rely on peer-recognition to encourage innovation throughout the entire organization.

> *"For instance, in addition to monetary rewards, 3M instituted awards to recognize and encourage employee contributions. In 1963, 3M formed the Carlton Society (the*

highest honor) to honor technical employees for their achievements. In addition to this it also formed The Technical Circle of Excellence and Innovation to honor employees whose innovations had considerable influence on the company's products, processes or programs. 3M also constituted awards for recognizing the achievements of non-technical personnel. Its Pathfinder Program honored sales, marketing, logistics, finance and production teams for developing innovative methods for launching new products in the market."[162]

The company provides a double career ladder (a managerial and a scientific one) for innovators, particularly in R&D

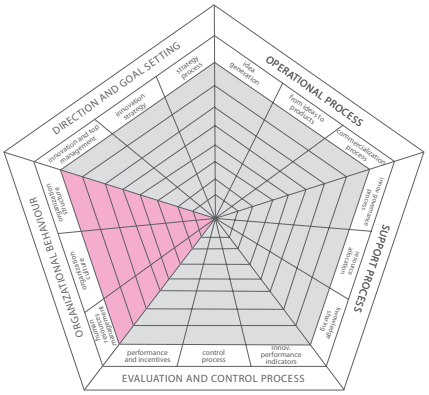
Numerous professionals seek the opportunity to achieve a managerial responsibility and to move upwards within the organization. It is normal in organizations to offer managerial positions to those who performed well over time. However, for technical professionals (engineers and scientists) this is not always the right option. In many cases they will prefer the freedom to pursue their technical interests and to make judgments in their areas of technical competence rather than having to assume more managerial responsibility.

Organizations should be aware of these differences in career orientations. They should also create reward options that take these differences into account, in order to keep their employees motivated. The dual ladder system was developed to meet these diverse career interests by formalizing promotions along two parallel hierarchies: one provides managerial progression while the other provides opportunities for professional advancement.[163] "A dual ladder system promises equal status and rewards to equivalent levels in the two hierarchies. By providing the more professionally-oriented specialists with opportunities and incentives to remain active in their fields, without having to shift to management, the dual ladder aims to secure for the firm a highly motivated pool of technical talent".[164]

"The dual career path adopted by 3M, created two career ladders: technical and management. This approach allowed even a technical person to get promoted to the vice-president level without taking on managerial and administrative responsibilities. The objective is to attract and retain scientists, engineers and other technical employees who are highly motivated by a desire to contribute to their fields of knowledge and to establish distinguished technical reputations."[165]

"Though there were various star performers in Pixar, there was a 'No Hero' culture. The team was always given preference. The company recognized that moviemaking was a collaborative process, and when a project succeeds, it wasn't usually due to any one person's contribution. Though the star performers got higher salaries and received larger blocks of options, when a film did well, everybody would be given a bonus. Analysts noted that the hallmark of Pixar's culture was that they recognized both the artistic side and technical side as being equally important. In other places generally one group was given priority over the other. The decision makers at Pixar felt that when either the artistic or the technical side dominated, it was unhealthy and could be counter-productive for the organization."[166]

Organizational behavior



The last component of the Integrated Performance Management Framework is the 'Organizational behavior' component. The activities that we have grouped here, aim to create commitment and motivation across all employees and managers within the organization. The organizational behavior component not only consists of processes but encompasses structural elements as well. For example, the organizational design is an important determinant of organizational behavior. We pay attention to HRM practices, organizational culture, and the organizational structure of product leaders.

1. Human Resource Management

The company pays special attention to attracting, selecting, and retaining people who are very good, creative and have a non-traditional perspective

To be effective and sustainable over time, product leaders need a combination of talents, particularly from program managers and project leaders. Product leaders are aggressive recruiters and pay special attention to attracting, selecting and retaining the 'right' innovation leaders.

These leaders share the following characteristics:

- They are creative; they identify and capture all possible differentiation opportunities even in established and mature products and markets, and find solutions to markets and customer problems.
- They are able to think out-of-the-box, i.e. they are open to new ways of seeing the world and they are willing to explore.
- But on the other hand, innovation leaders also know when to focus on implementation and efficiency. Innovation is more than managing a fuzzy, creative part. It is also, as Deschamps has called it, about managing 'the speedy back'. This phase, which is about managing from product concept to launch, is characterized by execution discipline.
- Finally, innovation leaders are customer centric; they want to improve products and processes relentlessly without complacency, and they want to shorten lead times to beat competitors in speed on their markets.[167]

Product leaders do not only focus on selecting the right leaders. They look for innovative people throughout the entire company.

> *"For 100 years, 3M's formula for growth – 'recruit the right people, provide them with the right environment to work in and let them do their thing' – resulted in around 55,000 products and over thousands of patents for the company". 3M recruited people who were creative and had a broad range of interests. According to company sources people who had a broad range of interests were willing to learn and explore new ideas. In addition, they brought a multi-disciplinary approach to their work. To make it easy*

for recruiters, 3M codified the six traits of innovative people in its recruiting brochure: creativity, broad interests, self-motivated, resourceful, hard working, problem solvers. The company felt that people with the above traits would be able to take the initiative and lead and encourage others to accomplish their goals. 3M not only recruited people with the above traits, it also tried to retain them. The company realized that to retain innovative people, it must provide them a challenging work environment."[168]

As the example of 3M has shown, creativity should also be managed lower in the organization. Product leaders know how to manage creativity. According to Christopher Westland, "creativity requires at least five types of people for success:

- "Idea generators: individuals who can sift through large quantities of technological and market data to identify potentially successful innovations, filling the opportunity register of the firm;
- Gatekeepers and boundary spanners: individuals who communicate ideas from one department, company or industry, to another;
- Champions: entrepreneurs, evangelists and other promoters of new ideas, who see the market value even though they may not have very great technical knowledge;
- Sponsors: coaches and mentors who can clear the way politically for an idea or invention;
- Project managers: administrators who can attend to the details required of a high-quality, timely product introduction."[169]

It is important to note that each of these types of people work best if they exhibit a unique personality suited for the role. "Gatekeepers and boundary spanners are social and extroverted, whereas idea generators may tend towards introversion. It is probably best that champions be politically savvy and independent from the inventor. Individuals may share roles, but often in practice, the various individuals that make a firm creative may not get along with each other all that well."[170] This adds to the considerable challenge of team building and the creation of a specific career ladder for each type of individual.

The creativity of the organization is one of the product leaders' most cherished resources. Creativity can be stimulated in several ways. Tolerating mavericks is one option. Mavericks challenge 'group think', and as such are not always popular in organizations. They tend to be characterized as 'difficult to deal with.' But product leaders show more patience with these mavericks, of course not at all cost. Another option is to have contacts with outsiders, who bring in fresh ideas.

Product leaders also seek to boost creativity by promoting staff diversity. Diversity is desirable for innovation because creativity feeds on the confrontation of complementary or even opposing perspectives and ideas. This does not happen when everyone in the organization comes from the same world. Companies thus, look to hire people of different age, gender, origin and culture, and educational background in order to enhance organizational creativity.[171]

"Nokia believes that diversity is one of the key determinants of success, as it increases creativity, mirrors the marketplace, and improves the attraction and retention of human resources among other things. Nokia strongly believes that individual differences in perception and experience can be a very important source of ideas and seeks to harness these differences. The results are reflected in every aspect of the company's

work, from management decisions to behavior, and to the way the company relates to its employees, customers and business partners. Interpersonal relationships in such a culture are of a positive and constructive nature, based on mutual respect and an awareness and acceptance of individual differences. The responsibility for creating and nurturing such an environment is also shared by all employees."[172]

"Intel's policies emphasized providing equal employment opportunity for all applicants and employees without regard to race, color, religion, sex, national origin, ancestry, age, disability, veteran status, marital status, sexual orientation or gender identity. Intel also attempted to accommodate disabled applicants and employees to apply for and to perform the essential functions of their jobs."[173]

The company is eager to nurture the individual talents of its employees and fosters a climate of creativity, innovation, and development (other than technical training)

Another characteristic associated with product leaders is the extent to which they commit to training and development. Studies at national, sector and company level repeatedly stress the relationship between investments of this kind and innovation capability. Equipping people with the skills they need to understand and operate new equipment is an important first step, but training and development should not be limited to technical training. Instead companies should offer training on a broad portfolio of topics from which people can choose. This will act as a motivator because people value the experience of acquiring new skills and abilities, and also feel valuated as part of the organization.[174]

"According to Professor Sir Ken Robinson, internationally-renowned expert in the field of creativity and innovation in business and education, the most distinctive features of Pixar's organizational culture was the Pixar University (PU). This was a continuing program of lectures, workshops, courses and events that went on every day at the Pixar facility. The unit was headed by Randy Nelson whose prime responsibility was to help the employees express their creative ideas, collaborate among themselves, and meet project deadlines. As of January 2006, PU offered more than 110 courses, including a complete filmmaking curriculum, classes on painting, drawing, sculpting, and creative writing. Classes were offered in diverse skills such as improvisation, storytelling, and even karate, juggling, and belly dancing. Every employee took at least half a dozen or so courses in a year.

All employees were entitled to spend 4 hours each week of paid work time taking part in the Pixar University. Participation wasn't limited to the 'creatives'; it was open to all staff, at every level and in all functions of the company. The courses they took did not have to have any direct relation to their work. They took whatever caught their interest. According to Nelson, these classes are not considered as a break from the routine, or perks for a creative workplace, but an important part of the job itself. The idea was to make art a team sport by having people do it together and fail publicly at it. Nelson commented: 'You have to honor failure because failure is just the negative space around success.' The program had two major purposes and benefits. Firstly, it provided a constant flow of new ideas and experiences that enriched the individual lives and minds of the staff and this made Pixar a more attractive company to work for. The process also fed the creative culture of the organization as a whole. Secondly, it promoted direct

personal contact and informal communication across the company."[175]

The aim of these companies is to develop their employees' knowledge not only in a (technical) topic but to encourage them to broaden their areas of interest. This boosts creativity significantly.

The company does whatever it can to take care of the well-being of the employees and to create an environment where they enjoy a long and productive career

Creativity and innovation are very much linked to the environment in which people work. Innovation cannot come from employees who are not happy and comfortable in their work place. Product leaders consider their employees as their most important asset, and therefore their challenge is how to build the kind of organization where creative and innovative behavior can flourish. They have organized many benefits for their employees in order to make them feel important and valuable to the organization.

One of these elements is the working environment of the employees. As Bettine von Stamm, innovation specialist, explains: "the right work environment opens up all those channels of the best ideas inside of them. Every human being deserves to have the environmental support. It feeds the spiritual needs of the human; it feeds the mental needs, the emotional needs and it definitely comforts the physical needs."[176] Our study showed similarities in the lay-out of the work environment among product leaders. A number of organizations create informal meeting points such as kitchens, lobbies and cafeterias where people can bump into each other and comment about a project they are developing without the need to schedule a meeting. This situation gives an informal approach towards work. People can discuss ideas with a cup of coffee or can have a sandwich in the cafeteria.

> *"Google has an informal work culture at Googleplex (its headquarters). Both founders Larry Page and Sergey Brin wanted to make Google a fun place to work. Reflecting their beliefs, the Googleplex was decorated with Lava Lamps and painted in the bright colors of the Google Logo. Googlers were allowed to bring their pets in to the workplace, and were provided with free snacks, lunch and dinner prepared by celebrity chef Charlie Ayers. The Googleplex had snack rooms offering Googlers cereals, gummy bears, cashew nuts and other snacks along with fruit juices, soda and cappuccino. In addition to the above facilities, Google provided recreational facilities such as workout gyms, assorted video games, a pool table, ping-pong and roller skater hockey."*[177]

> *"In the centre of Pixar's headquarters, an inviting common area in the building main atrium lays open. Here employees are able to meet with each other. It serves as a main reception, eating area and market square. It also has the main café and a number of coffee shops, employee mailboxes and pool. To get anywhere and to eat, employees have to go across this place. "Anybody needs to be able to talk to anybody else. Creativity doesn't follow titles; it just comes from everywhere it comes from. You'll make the necessary encounters. You don't have to arrange to see somebody. You'll cross them in the hall, stop and have a discussion, talk about something you haven't had time to talk about, and that can change the course of things."*[178]

Employee's welfare and health are equally important for product leaders, who look to provide side activities in order to allow employees a relaxing time during or after work hours.

"At Pixar there is a soccer field, volley ball courts, a gym, and an Olympic-size pool inside the compound and a badminton court in the lobby. Classes in yoga, Tai Chi, and Pilates were also conducted for the general well-being of the employees. Pixar also boasted a full time dedicated ergonomics expert to make sure that people had comfortable workplaces and that their computer keyboard were in the optimal position."[179]

The concept of employee well-being is also taken very seriously in Optima Group. Optima Group is a 'Brand identity' firm located on the north shore of Chicago. This is the company that introduced the concept of Body Spray in the US for its customer AXE. Thanks to Optima, AXE became a huge hit in the US.

"From the start, the company's culture is taken very seriously, 'It doesn't matter if we're filling a design position or an administrative position – we want good people with a sense of humor. We're not so much about individual accomplishments as we are about team accomplishments,' says Ann Werner, one of the founding partners. To this end, Werner and partner Lyle Zimmerman encourage group activities that help build a strong bond among its 20 employees. Summer months are full of activities, such as annual Cubs baseball and Ravinia Music Festival outings. Bowling night is a fun way to incorporate families and significant others, and children and dogs make frequent appearances in the office. From a more professional viewpoint, the founding partners have taken into account the fact that Optima is not located in Chicago's downtown, where culture, shopping, and entertainment are always a short walk away. The company tries to counteract this in several ways. Whenever we grow and need to re-locate, we make sure we find a space close to a train line so that the employees who live downtown have a convenient way of getting to the office. The company even bought scooters for employees who motor down to Lake Michigan in good weather. 'We want our people to be fulfilled and happy,' says Zimmerman, 'and we've become like an extended family. We care about them as individuals, not just as employees. It's all about quality of life.' Moreover, each year two designers, on a rotating basis, attend a major design conference in order to learn about design trends and renew their creative spirits. One staff person is currently on sabbatical on the West Coast."[180]

2. Organization culture

In almost all publications on product innovation and product leadership, it is stressed how important an innovation culture is.

The company has a culture that encourages its employees to take the initiative and come up with new ideas

Many organizations launch innovation initiatives, and give 'innovation' a central place in their strategy. But the innovation strategy will only lead to significant results if the entire organization embraces innovation and entrepreneurship fully and when creativity is a crucial element of the DNA of the entire organization. The top management needs to create an innovation vision, and an innovation strategy, and needs to put all the processes in place that help to innovate in a structured way. But innovation is "fuelled by ideas, and driven by culture," as is nicely remarked by Jean-Philippe Deschamps.[181]

What constitutes an innovation culture? We found the following common elements in the culture of product leaders:

- A curiosity for detecting unarticulated needs of the customers and a willingness to try new things to meet these needs.
- A culture that supports organizational creativity. Product leaders stimulate creativity in many different ways. We talked about this element when discussing HR practices of product leaders.
- A 'can-do' climate and an entrepreneurial culture, that allow people to experiment in a positive environment where failure is accepted.
- A culture that rewards winners and that stimulates everybody in the organization to try new things as well.

Joe Tidd and John Bessant have described what innovation behaviors looks like. "The most useful innovation behaviors are *freshness* (trying new stuff), *greenhousing* (building an idea through collaboration), *realness* (quickly making an idea into the form a customer will buy it as), *bravery* (guts to disagree), and *signaling* (helping a group navigate between creative and analytical behavior). Let's dwell on this last behavior. We have found that it's essential to have at least one person with sufficient emotional intelligence to be able to comment on the dynamics of the group. We call this 'signaling' and it's real art. This is what it sounds like – 'guys, let's step back a bit, we're drilling so deep into the economics of the idea that we're killing it.' Without this behavior the line between analysis and creativity becomes blurred and innovation collapses."[182]

In another study, Joe Tidd has found that the following climate factors differentiate between very innovative and less innovative companies.

Figure 13 Climate factors influencing innovation

Climate factor	Most Innovative (score)	Least Innovative (score)	Difference
Trust and freedom	253	88	165
Challenge and involvement	260	100	160
Support and space for ideas	218	70	148
Conflict and debate	231	83	148
Risk taking	210	65	145
Freedom	202	110	92

Source: Isaksen and Tidd (2006)[183]

Companies develop this culture not from one day to the other. It takes time to develop an entrepreneurial culture. It is based on years of constantly focusing on innovation and creativity. The role of the CEO in this entire process is extremely important. The CEO is a role model, and if he/she talks about innovation but does not live innovation, chances are high that the entrepreneurial culture vanishes very soon.

> *"The ethos of Cirque [du Soleil] comes from its origins, a hippie counterculture representing the artistic and bohemian life. This countercultural element, the foundation of the international success of the Cirque du Soleil, has contributed to a culture of teamwork, innovation, and commitment. The Cirque likes to be seen as the most inspiring, most creative company in the world – a veritable laboratory for creativity. To keep the creative spark going, the Cirque's leadership makes a great effort to expose its people to other creative groups and to foster interaction between the creators and the supporting organizational staff. The company is primarily artist-driven because of its strong belief in the power of 'creative contamination.'"*[184]
>
> *Lyn Heward, Executive Producer and Senior Advisor at Cirque du Soleil: "Creativity is first and foremost all about courage – a willingness to take risks, to try new things, and share the experience with others. In fact, as an individual or as a company, complacency is the biggest risk you will ever take, and most often the least productive. Risk-taking can be defined as the balance of power between success and fear of failure. So the moral of this story is that we all need to practice risk taking! Our fears hold us back cautious… instead we need to forge ahead and make a few mistakes… and hopefully learn from them. Here, we call this research and development."*[185]

Employees are free to communicate and set up collaboration initiatives across departments

Many problems in the innovation process occur through failures in communication, particularly between different functional departments, involved in the process. Developing mechanisms for resolving conflicts and improving clarity and frequency of communication across departments are critical to innovation success. Communication and constructive interaction in an innovative company is multi-directional (up, down and lateral) and makes use of multiple communication channels. Cross-functional teams enable communication through the different knowledge bases of team members and ensures cooperation across functions. [186]

A company can encourage effective communication in several ways. *Team briefings* enable team leaders and managers to communicate and consult with their staff. *Formal meetings* encourage a more formalized approach to communication. *Face-to-face communications* promote a free and frank exchange of ideas. Other ways of communication such as e-mail, electronic notice boards, physical notice boards, newsletters, phone, fax, videoconferencing are used extensively with product leaders.

> *"In addition to providing an environment that stimulated innovation, 3M also took steps to encourage knowledge sharing among its employees. According to analysts, innovation could flourish in 3M because the management encouraged its employees to talk. 3M employees never experience any communications barriers. Employees were free to communicate across departments and with management in order share ideas."*[187]

The company has a no-blame culture that stimulates risk-taking behavior and learning

In order to have a culture where creativity can flourish, "organizations must be willing to allow a certain amount of risk-taking. Risk implies a danger of failure, but innovative companies know that failure is as essential a part of the growth process as success. Product leaders understand that risk-taking is necessary and make that message come alive through their employee communications, their idea-sharing and evaluation processes, their recognition programs, and their reward systems".[188]

Managing employees in a way that encourages innovation requires leaders to acknowledge and reward risk-taking behaviors, not just successful outcomes. John Sweeney, author of *Innovation at the Speed of Laughter,* suggests managers use techniques such as initially welcoming all ideas without first judging them, creating an atmosphere where opinions can be freely shared, and reinforcing the value of employees' contributions by acting on them.[189]

> *"In one major and quite conservative North American bank, the project leader stood before a senior gate-keeping committee comprised of seniors VPs and was obviously very nervous. He was about to present a negative report and recommendation 'to kill (stop) the project now'. In spite of a valiant rescue attempt by his team, the project was headed for disaster. To his surprise, the senior executive chairing the meeting broke out in applause; this was quickly followed by clapping from the rest of the VPs in the room. He explained: 'A correct kill must be considered a success. Instead of dropping another $7 million on this project, I'm cutting my losses… you just saved me $7 million. Thank you for your frank and honest assessment on the situation'. Far from being fired, as the project leader feared, he went on to drive the replacement project to a very successful result, and was subsequently promoted."*[190]

A company that encourages risk-taking and has a no-blame culture will develop an entrepreneurial spirit among its employees. However, it is important that the reasons for failures are analyzed by both management and employees and communicated across the organization in order to learn from mistakes and build best-practices.

3. Organization structure

The organization is characterized by low levels of formalization and fosters informality in the management of the company

A deep dive into business cases has given us an insight of product leaders' cultures. It is noticeable that no matter how well developed the systems are for defining and developing innovative products and processes, they are unlikely to succeed unless the surrounding organizational context is favorable. Achieving this is not easy. It involves creating appropriate organizational structures and processes that minimize the distance between employees and executives and foster informality in the management of the company.[191]

Rigid, hierarchical organizations in which there is little integration between functions and where communication tends to be top-down and one-way in character are unlikely to be supportive to the smooth flow of information and to cross-functional cooperation.

Therefore, a key to successful innovation is to let go of centralized control. People who stay closer to customers know better the market needs and can respond faster to rapidly changing customer requirements. In organizations where low levels of formalization exist, decisions are made faster, entrepreneurial creativity of employees is released, and ideas are managed better. Therefore, many organizations have decided to loosen their structures and empower the employees to make decisions. Managers also believe that by doing so, they eliminate communication barriers and encourage people to share ideas and opinions.

> *"Pixar Animation Studios, founded by Edwin Catmull and headed by Steve Jobs, is considered one of the rare movie studios to have produced some of the most successful movies in Hollywood history, all five in a row. The company earned revenues of $263 million in 2003 and profits of $125 million. Apart from attracting the best talent in the industry, Pixar, analysts say, has created an organizational culture that nurtures and fosters creativity and technical innovation.*
> *Analysts say that along the way, Catmull also created a unique organization, where creatives and technical experts worked seamlessly without the barriers of hierarchy of functional divisions. The three main groups of Pixar are 'creative development,' which generates the storylines and characters and animates them, 'technology development,' which develops the computer-graphics methods and tools and 'production,' that synchronizes and coordinates the efforts of the other two groups and oversees the filmmaking process. The hierarchy, or the lack of it, is considered a major reason why new tools and techniques are developed and put to use in all Pixar's movies."*[192]

"Preoccupation with status and inhibitions caused by status differences in the organization impede innovation".[193] On the other hand, low formalization promotes openness and flexibility in roles, which is a precondition for the initiation of new ideas.[194]

> *"From the beginning, Intel has strived to shape a unique, result oriented work culture that attempted to minimize power distance. All employees including company co-founder Andrew Grove sit in identically sized cubicles located in a big hall. Low partitions*

separate executives from the rest. Intel made a conscious effort to foster informality in the management of the company. Senior management does not get dedicated parking places and they eat lunch with the other Intel employees."[195]

The organization has cross-functional innovation project teams that are empowered to make project decisions that cannot be overruled by functional heads or senior management

Innovation is increasingly about team work and the creative combination of different disciplines and perspectives. "Projects undertaken by empowered, cross-functional teams are more successful."[196] Cross-functional teams contain representatives of all the disciplines involved in the innovation efforts (R&D, design, engineering, manufacturing, marketing, and key customers and vendors). These teams should have the autonomy to run and implement the project. Teams of this kind are not formed simply by grouping people together. Successful practice involves extensive investments in team-building and providing the team members with the necessary training to solve problems and to manage conflicts. Training may also deal with how to interact with other parts of the organization and with outside stakeholders.[197]

Cross-functional teams have become more popular in recent years for several reasons. First, they improve coordination and integration. Second, they span organizational boundaries and therefore reduce the production cycle time in new product development. Third, bringing people together from different disciplines can improve problem solving and can lead to better decision making. The teams foster a spirit of cooperation that can make it easier to achieve strategic results.[198]

"A manager at Logitech said that when they receive a proposal or business plan that meets the necessary criteria, and has been accepted for development, they put a team of people together from different business units: product marketing, operations and engineering. These people work aggressively on turning the idea into a tangible product"[199]

Cross-functional teams are not used in product leadership companies. For example, service-oriented organizations have account teams composed of people from different departments. And many organizations have installed cross-functional quality teams that examine the continuous improvement of the overall processes in the organization. The cross-functional teams of product leaders are different in nature. They are project teams that transform ideas into concrete products or services.

Innovative organizations ensure that these project teams have the freedom to make their own decisions, without having to go through a bureaucratic process. The leader and team must be empowered to make project decisions, which cannot be overruled by functional heads or senior management. Innovation project leaders should be responsible for the project from beginning to end. Cutting the project into 'functional segments' it is not very helpful. Project teams are the appropriate way to manage individual projects. Treacy and Wiersema have described it as follows:

"Product leaders have learned that they can avoid the embarrassing 'oops!' of discovering too late the engineering's design can't be manufactured, that the product can't be serviced, or that it's not what customers want. Their solution is to *work cross-functionally* and pay close attention to the later

development stages. There, they apply themselves to understanding the root causes of glitches. They map their processes and workflows backwards to learn what created those time delays and mis-directions. Complexity demands coordination of an unprecedented kind, one of the biggest demands imposed on a product leader. 'The trick is to pull together as a total corporation – to look at product, manufacturing, promotion, sales, and advertising as one entity. Compare it to an orchestra made up of different instruments but all performing one symphony together. Every player has a major role. If we are out of sync, we are in trouble.' Sometimes, they have a set of overlapping teams. Each individual working on the project really belonged to a couple of different teams. The challenge for management is to organize in accordance with natural teams and is contrary to standard organizational boundaries."[200]

The company emphasizes loose couplings of groups and a flat hierarchy in the organization's structure

Organizations that emphasize loose coupling of groups and a flat hierarchy in their structure are more innovative. Such a structure implies higher levels of autonomy, which facilitate the sharing of expertise, more open and frequent communication, and a tendency to focus on results.[201] A flat hierarchy does not imply that there is no leader or manager. Even at the opposite! Successful product launches are headed by a dedicated and accountable project leader! Ideally, these team leaders should be dedicated to only one project. In reality, this is often not the case. Robert Cooper found that on average "team leaders are spread too thinly across too many projects or have too many other duties to run projects effectively."[202]

> *"McKinsey had developed a philosophy of management with a set of guiding principles. One of those principles was the 'de-emphasis of hierarchy.' "We have tried to avoid a hierarchical structure, and we have not stressed position or titles either inside or outside the firm. In all successful professional groups, regard for the individual is based not on title but on competence, stature, and leadership."*[203]

Product leaders ensure that the overall structure in the organization is flexible enough to take advantage of new opportunities. "Product leaders create business structures that don't oppress. Large companies replicate small ones' entrepreneurial spirit by breaking people up into teams or clusters. Or they locate their research labs in the woods, away from the companies' potentially stifling headquarters. CEOs of these departments should act as entrepreneurs, not divisional caretakers."[204] In the management literature, we call these organizations 'organic organizations.' The term 'organic' suggests that, like living things, organizations change their structures, roles, and processes to respond and adapt to their environments. Organic organizations have no problems to create new divisions, or to redefine the corporate structures, to better capture new trends in the market.

> *"Founded in 1998, Google was worth $206 billion in 2007 and generated revenue of $10 billion annually. Although, Google provided free search, it had been generating revenues by providing advertisers a platform for targeted online advertising. An analysis of t style revealed that Google was a company that refrained from too much hierarchy and structure. It was a place, where ambiguity and chaos were often encouraged. While the leaders at Google believed that chaos was the reason behind its success, the analysts remained skeptical about the issue.*

Although Google had been growing at a rapid pace, the company still preferred to maintain a 'small organization' feel. The company focused on innovation all the time and every employee was made to feel like a significant contributor to the organization's success. The company's hiring policy was totally non-discriminatory and was more in favor of ability rather than experience. Google had offices across the globe and the Google employees spoke a variety of languages. When the employees were not working, they would be pursuing other interests like country cycling, wine tasting or Frisbee. The company was always on the lookout for persons, who were committed to the idea of creating a better search experience and who would enjoy themselves while at it."[205]

Many large organizations lack this flexibility. Their corporate structures create so many bureaucracy and internal wars that stifle innovation.

One big global chemical company launched a new technology in a very promising new business. The corporation consisted of five major divisions. The new initiative was supported by two of those big divisions. When the products were ready to be launched, there were huge discussions about the profit split between the two divisions. Both divisions wanted to get their part of the pie, as this new venture helped them to realize the ambitious growth targets the corporation had imposed. These discussions were very counterproductive and disappointed many of the team members of the new venture. They were confronted with 'politics at a very high level' in the organization, and had to spend a lot of time and energy in what they considered not productive actions.

Conclusion

This chapter has explained what it takes to be a product leader. The simple conclusion is: it takes a lot to become and remain a product leader! Our Integrated Performance Management Framework was used to illustrate the numerous actions product leaders take to stay ahead in the innovation game.

Actions should be taken in five broad areas of management: (1) direction and goal setting, (2) operational processes, (3) support processes, (4) evaluation and control processes, and (5) organizational behavior. The actions a company undertakes in one area support and reinforce actions taken in the other management areas. For product leaders, this leads to a set of processes and systems that stimulate creativity, entrepreneurship, and a culture of innovation and risk-taking behavior, where attention is also paid to managing with high quality.

PART B
PRODUCT LEADERSHIP IN SERVICE COMPANIES

Introduction

Services have become increasingly important for the economic development in many countries. Because innovation is among the key drivers of growth and development, innovation in service firms has become an important topic for policy makers.[206]

In the previous chapter we have introduced a framework for strategy implementation that explains the actions product leaders take to become successful. In the following section we want to illustrate how this framework can be applied to service companies and describe the differences between product leaders in service versus product industries.

The nature of services

It is widely recognized that research studies on innovation in the service sector have lagged behind those in the manufacturing sector.[207] Several authors argue that the specific characteristics of services affect the new service development process. These characteristics are:

Intangibility. Services are not tangible. They are difficult to display, because you cannot see them or touch them. This means that services cannot be examined prior to purchase and consumption.[208] Hence, the decision of repeating a purchase will be merely driven by experience.

Simultaneity. "Tangible goods are produced, sold and consumed, whereas services are sold, and then produced and consumed".[209] The characteristic of simultaneity makes both the customer and supplier involved with the final output. The client follows closely every step of the process and his/her perception of quality is influenced by the appearance of the service delivery system.

Heterogeneity. Service companies can try to standardize their offerings. However, the service will be different each time it is delivered because customers and suppliers have a different approach and perception of the service delivered.[210]

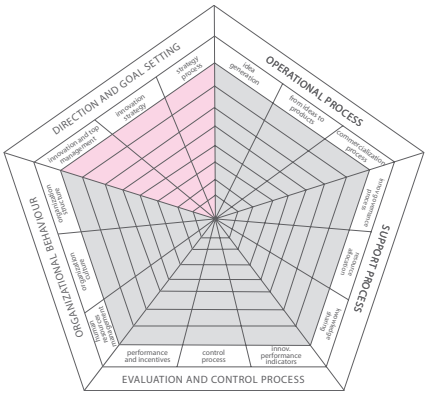
Perishability. Services cannot be stored. "Spare seats in a package tour or an empty hotel room represent capacity lost forever if they are not consumed when they are available at any point in time".[211]

These characteristics, especially the first two, have an impact on the innovation process. The intangibility of services means that there are no patents to protect the innovation efforts. It is thus difficult to prevent competitors from copying service innovations. This means that innovations can have short life cycles because they are easy to copy. Second, innovation in service companies is not only about "what" is being offered but also "how" the service is being offered.[212] Customers therefore play a very important role in this process, as do employees. As a consequence, efforts must be made to assure that "employees fully understand new services and deliver them in ways consistent with the provider's vision of them".[213] These factors might lead us to conclude that innovation is not appropriate for service firms.
The reality tells us a different story. Some services firms have chosen for product leadership as a way to differentiate from the competitors. And researchers have investigated what service innovation

is all about. We have gone through this literature and interviewed some innovation experts to hear from them how service innovation is different than innovation in product companies.[iv] The differences between physical products and services have been a subject of debate for some time.[214]

In the remainder of this chapter, we will use the Integrated Performance Management Framework to service companies and discuss the impact of the services' characteristics on the organization of the innovation process.

Direction and goal setting



In this section, we explore how product leaders in the service industry use direction and goal-setting activities to stress that innovation is a top management priority. Management needs to define a clear and ambitious innovation strategy, as well as to develop a clear set of processes that puts innovation at the core of the strategy-setting process.

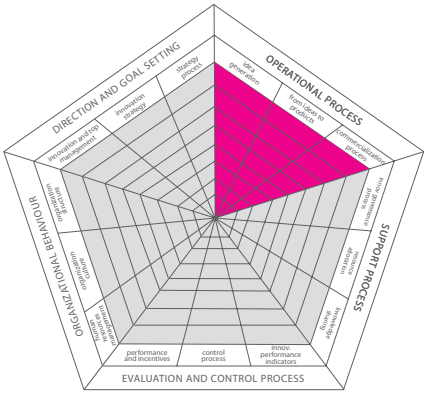
For a service company to succeed in product leadership, it is necessary that management promotes innovation and entrepreneurship as a priority for the organization. For this to be true, management needs to listen to people who are close to the customer and take their input into account. As it will be explained later in this document, a learning organization is greatly influenced by the behavior of leaders. This is especially true in the service industry due to the nature of the offerings.

During the development process, a manager should have a high degree of confidence in his employees, encouraging them to take risks and helping them learn from their mistakes instead of blaming them.[215]

In terms of radical versus incremental innovation, it is agreed by many researchers that innovation in service firms has a different character than in manufacturing firms[216]. They argue that incremental innovations are far more widespread than radical service innovations.[217] Radical innovation (if existing) is expected to be developed in a formal process, similar to R&D projects in manufacturing companies (with a team in charge of the project from beginning to end). On the other hand, since innovation in service industries is often non-technological, incremental innovation is developed through a less formal approach, with employees who work on both their usual tasks, as well as the development of innovative ideas, alternately.[218] The development of these ideas will require less or no R&D.

iv We have interviewed Koenraad Debackere (KU Leuven), Marion Debruyne (Vlerick Leuven Gent Management School), Floortje Blindenbach-Driessen (Vlerick Leuven Gent Management School), Patrick Vermeulen (Universiteit van Tilburg), Deva Rangarajan (Vlerick Leuven Gent Management School). Herewith, we would like to thank these authorities for their valuable input.

Operational processes



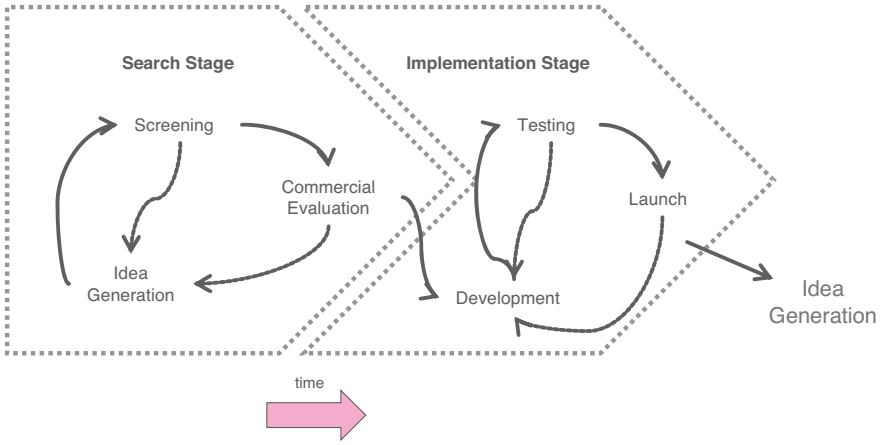
Operational processes involve all the activities, from the creation to the delivery of a product or service. For product leaders, the elements of the operational process go from the idea generation to the launching of the product/service to the marketing and commercialization.

The process of idea generation in the service industry follows a similar pattern as in the manufacturing industry. Although service firms rarely have R&D departments, in some cases an innovation department can be found. According to Easingwood (1986), there is widespread agreement on the advantages of having one or more individuals with specific responsibility for New Service Development (NSD).[219] The function of such individuals is to collect and screen ideas and to evaluate them if they fit the company's strategy.[220]

In the service sector, ideas usually come from employees that are closer to the customers. But research has shown that ideas also come from other sources: the marketing department, outside agencies (i.e., advertising and consulting), market research, competitors, customers, overseas markets, and suppliers.[221] The results of Easingwood's survey (1986) indicate that for the majority of service companies, generating a large number of new product ideas does not seem to present any problems (an average of 26 ideas per year is generated).

Figure 14 depicts the vision of De Jong et al. (2003) of how the NSD process works in a service company.

Figure 14 A model for New Service Development



Source: De Jong et al. (2003: 33)[222]

De Jong suggests that a general drawback of the NPD models is their linear nature. Steps are distinguished that need to be made sequentially. This approach results in long development lead times, communication problems and increased costs. In his model, he points out that in a rapidly

changing environment such as in the service sectors, linear models are less useful. The NSD can only be successful if large amounts of information from various departments are integrated. For this reasons, NSD activities should be allowed to overlap.[223]

The lack of R&D departments in service companies might give the impression that a formal NSD process is not needed. However, research has proven that companies that have implemented successful new services had a systematic process in place.[224] Bank of America is a great example. This firm has been running a series of formal experiments aimed at creating new service concepts for retail banking. In 1999, the management of Bank of America appointed an Innovation & Development (I&D) Team to be in charge of the collection of ideas and the transformation of these into prototypes before they were officially launched as new products.

> *"For the I&D Team, the critical first step was coming up with ideas for possible experiments and then assessing and prioritizing them. Ideas were submitted by team members and by branch staff and were often inspired by reviews of past customer-satisfaction studies and other market research. Every potential experiment was entered into an "idea portfolio," a spreadsheet that described the experiment, the process or problem it addressed, the customer segments it targeted, and its status. The team categorized each experiment as a high, medium, or low priority, based primarily on its projected impact on customers but also taking into account its fit with the bank's strategy and goals and its funding requirements. In some cases, focus groups were conducted to provide a rough sense of an idea's likely effect on customers. In three years, more than 200 new ideas had been generated, and 40 of them had been launched as formal experiments.*
>
> *Once an idea was given a green light, the actual experiment had to be designed. The I&D Team wanted to perform as many tests as possible, so it strove to plan each experiment quickly. To aid in this effort, the group created a prototype branch in the bank's headquarters where team members could rehearse the steps involved and work out any process problems before going live with customers. The team would, for example, time each activity required in processing a particular transaction. When an experiment required the involvement of a specialist-a mortgage underwriter, say-the team would enlist an actual specialist from the bank's staff and have him or her perform the required task. By the time an experiment was rolled out in one of the branches, most of the kinks had been worked out. The use of the prototype center reflects an important tenet of service experiments: Design and production problems should be worked out off-line, in a lab setting without customers, before the service delivery is tested in a live environment".*[225]

Although companies like Bank of America and the world's number-one restaurant, El Bulli, have had great success with their R&D labs, not all service organizations commit the resources to set up labs where experiments can be performed before launching a product. Many product leaders work on the development of new services on top of their daily routine. When the new offerings are ready, they are introduced on a small scale and with as little automation as possible. The purpose at this point is to test whether the new service operates correctly and to identify problems in order to make improvements before a national launch. In contrast to tangible products, the commercialization stage and the testing stage in services might overlap.[226] This is because it is not always possible to test

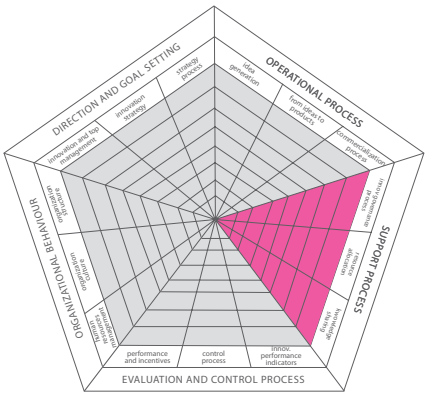
a new service before launching it on a small scale. As a result of this, service companies adopt a 'doing-it-right-the-first-time' attitude and make an effort to do the research up-front.

When designing and managing services, it is crucial to spend some time getting to knowing the customers, listening to their concerns and paying attention to their changing needs. This information will help the company to decide which products to develop. However, doing up-front work does not only mean understanding the customers' requirements. According to Floortje Blindenbach, an innovation expert that we interviewed, service companies have started to use discovery-driven planning as a tool to minimize risks when engaging in new product and service development.

Discovery-driven planning encourages team members to continuously check the initial assumptions until they become actual facts. Ian MacMillan and Rita McGrath (1995) argue that this kind of planning imposes a strict discipline that is captured in four related documents: "a reverse income statement, which models the basic economics of the business; pro forma operations specs, which lay out the operations needed to run the business, a key assumptions checklist, which is used to ensure that assumptions are checked; and a milestone planning chart, which specifies the assumptions to be tested at each project milestone. As the new venture unfolds and new data are uncovered, each of the documents is updated".[227] Using this tool effectively prevents the company from wasting time and money.

Another important aspect in the commercialization process is 'branding.' Services are intangible; we cannot touch, feel or see a service. They do not come in flashy packages and cannot be displayed or stored. This is why service companies need to rely on their corporate 'image' as a way to promote their service. Empirical research tells us that 28 percent of the new services implemented by an observed group of companies have as an important objective the support or enhancement of the business' image or reputation.[228]

Support processes



Support processes help to improve the effectiveness and efficiency of the operational processes. For product leaders, support processes encourage innovation and include the development of a formalized innovation process, as well as efficient resource allocation and knowledge sharing.

Time and money are necessary for innovation. In the idea generation stage, a lack of financial resources can be devastating for creativity. When employees are aware of the fact that there are no resources available to work out ideas, they will not be very motivated to generate them at all. In the implementation stage, resources are needed to develop service concepts, to sell these to customers, to collect feedback and to make adjustments.[229] Since most service companies have no R&D departments, budgets for innovation are often nonexistent. Hence, service firms need to make sure financial resources are put aside for the development of new ideas. A systematic process of funding needs to be put in place in order to maximize the use of these resources.

By creating a department or appointing a few people responsible for the innovation process, the company ensures that there are people responsible for collecting and selecting ideas and managing the allocated budget. The steering team, sometimes called the innovation board, will decide which ideas will proceed to the development stage and make sure that there are enough financial, physical and human resources available.

As in any other company, employees in service firms need some free time to work on and develop new ideas. Researchers suggest that employees might see the development of new services as extra work on top of their responsibilities. Since the employees' daily work has to continue, a service firm should help them find the right balance between innovation and daily work. This could be realized by, for example, giving them lower targets.[230]

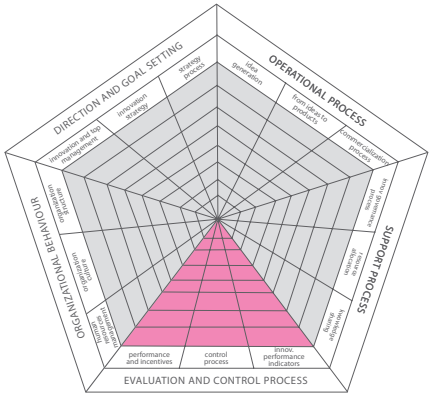
The diffusion of information within an organization is another factor which is relevant for creating a climate supportive to innovation. "A large diversity of information affects the idea-generating ability of the workforce".[231] It also enhances creativity and improves the problem-solving capability of the firm, preventing mistakes from being made in the future.[232]

Moreover, knowledge sharing is recognized as one of the key elements when building a Learning Organization. According to Amy Edmondson (2008), learning processes involve the generation, collection, interpretation, and dissemination of information. "For maximum impact, knowledge must be shared in systematic and clearly defined ways. Sharing can take place among individuals, groups, or whole organizations. Knowledge can move horizontally or vertically within a firm."[233] Right after a project is completed, the process might call for post audits or reviews that are then shared with others who are engaged in similar tasks.[234]

Knowledge sharing should not be only internally focused. "External focus also provides employees with information that stimulates idea generation and problem-solving capabilities. We conclude that both stages of the NSD process benefit from this. When the employees of a service firm have frequent, intensive contact with their stakeholders of the company (suppliers, competitors, research institutions, consultants, sector organizations), they will identify market opportunities and threats from their working environments much faster and use them to create or improve services. In service firms, due to the ease of copying, competitors have been identified as an important source of ideas for innovations".[235]

Evaluation and control processes

Companies which pursue a product leadership strategy need to align the performance indicators with the firm's strategic objectives, as well as with the control processes and the incentives given to the employees.



As was explained earlier, in order to become more innovative, a company needs to define the role of innovation within the organization. When management knows what is expected from innovation, they are in a position to define the objectives

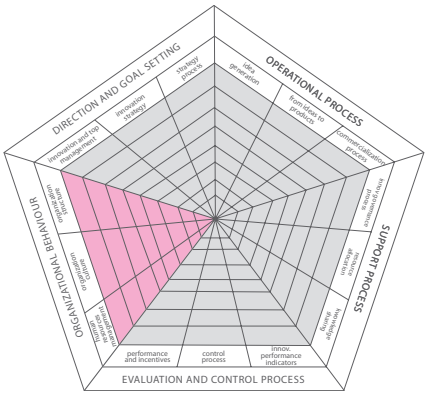
of the company and key performance indicators. Although metrics such as return on investment are largely used by both manufacturing and service firms, it has been proven that the biggest differences between product and service firms lie in the use of customer-based metrics. This includes customer satisfaction as well as attraction and retention of the customer base.[236] Service companies have the advantage of measuring customer satisfaction at the moment of delivering the service. This gives them the chance to introduce changes so as to improve customer's perception. A last aspect in the evaluation of performance in a service environment is the efficiency with which the service is delivered. Cost and speed of development and effectiveness of the process are some measures that can be used here.

Like in other product leaders, service firms' control systems should not only be used to control but also to learn and experiment. Creating an organization made up of employees skilled at creating, acquiring, and transferring knowledge is a big challenge. Amy Edmondson (2008) argues that the leader's behavior plays an important role in organizational learning**. "**When people in power demonstrate through their own behavior a willingness to entertain alternative points of view, employees feel encouraged to offer new ideas and options".[237] This creates a learning environment in which employees do not fear being judged or marginalized when they disagree with peers or authority or when they express their thoughts. Learning occurs when people become aware of opposing ideas and are open to experimenting with new things.

When people have the time to reflect on feedback from past experiences, their problem-solving capability increases and they are able to reduce the probability of failure. By talking to product leaders in the service industry, we discovered that submitting reports at the end of a successful or failed project is a common practice. This information is then available for anyone in the organization, and employees encourage each other to review this information before starting a new project.

The performance measures and incentive schemes used in product companies are also used in service companies. Managers of companies where innovation is part of the daily routine agree that they cannot offer large financial compensation to every good idea that is submitted. Instead, they opt for non-financial rewards which are considered to be as important as monetary recognition. Managers who consider innovation to be at the core of their organization reward their employees by offering them social recognition, granting them more responsibilities (e.g. becoming the project manager) or allowing them autonomy in their jobs. Initiatives and achievements of employees are registered in their personal track records. This information is then retrieved regularly in order to grant promotions or to allow advancement in the career ladder. Managers agree that when evaluating profiles for career opportunities, one criterion they use is whether the employee has shown entrepreneurial spirit and has proven to achieve success when trying something new.

Organizational behavior



The activities that we have grouped here aim to create commitment and motivation across all employees and managers within the organization. In the following pages, we explore the human resources practices as well as the organizational culture and structure of product leaders in service companies.

From the interviews we carried out, we were able to conclude that companies in the service and manufacturing industries are very much alike in the selection of the appropriate people (creative, out-of-the-box minded, etc). However, the simultaneity of production and consumption of services has an impact on the management of human resources in this industry. Research shows that while only 10 percent of the staff of the average manufacturing company directly influences the customer, the comparable figure in a service company goes up to 90 percent.[238] In a service firm, front-line employees are particularly important. The customer forms an impression of a new service from the behavior and attitudes of staff involved in the service delivery system.[239] The way in which the service is delivered will ultimately influence the image of the organization. As a consequence, successful service firms need to place greater emphasis on the selection, development, and management of employees who work directly with the customer.[240]

Service organizations recognize that formal attention has to be given to standardizing patterns of behavior towards customers and to ensuring the consistency of appearance. Employees will require understanding of: “(1) the service-delivery system as a whole; (2) the work procedures for an individual’s specific job; (3) work procedures for multiple jobs (if cross-training is an objective); (4) techniques for interacting with customers; and (5) means to use real-time customer and other feedback for service recovery and improvement”.[241]

For service companies, creating an organizational culture that fosters continuous innovation is not an easy task. “The behavioral norms and values that define culture are vitally important in services, in contrast to physical products, because behavior itself is the product”.[242] Experts agree that cultural norms can be a powerful means of stimulating innovation by attaching social approval to activities that facilitate innovation.[243] Research has found that when employees are free to express their thoughts and are encouraged to take risks and explore the untested and unknown, it is possible to create not only an innovative company but also a learning organization.

Innovation in services needs to be a fluid and continuous process. In services, the creative stage is closely linked to the implementation and execution stages. For this to work in an efficient way, it is important to stimulate communication throughout the organization. Patrick Vermeulen of the Tilburg University told us that when he studied innovation in financial services organizations, he found that most communication problems in banks tend to be situated on the interface between marketing and information technology departments. “It may be that the intangible character of these services makes it more difficult to come to a common understanding between people with different backgrounds.”[244] This is the reason why managers of service companies are convinced that multidisciplinary teams improve communication between functional departments.[245] These teams are believed to increase

the problem-solving ability and performance. “A multifunctional team should be established before a new service concept moves to the ’official’ development stage. This team must be encouraged to maintain responsibility for the new service for at least six months beyond introduction. Its goal should be to determine internal operation capabilities and support and to secure valuable feedback regarding the market’s desire for the new service”.[246]

As was explained in the previous pages, companies who have a formalized process of new service development have a greater chance to succeed than those where innovation is an ad-hoc process. Formalization contributes directly to the execution speed of the NSD process by providing guidelines which stimulate effectiveness and efficiency.[247] However, management needs to be aware that overly strict rules and procedures can have an opposite effect and can be devastating for creativity.[248]

De Jong et al. (2003) indicate that task rotation can be a way to steer innovation within service organizations. “Task rotation is frequently exchanging tasks and jobs among employees. This is a method to broaden the employee’s point of view. It makes employees in an organization familiar with each other’s work. This supports the innovation success in service companies. When coworkers experience frequent task rotation they find it easier to place problems in a wider context. Work experience in different job areas enhances creative potential, since the broad experience gained by employees will enable them more often to come up with ideas for improvement in services, delivery processes, etc”.[249]

Finally, in an organizational culture that stresses autonomy, employees are allowed to do their work freely and independently. They can choose their own approaches as to how to do their work. In service firms, the amount of autonomy that is perceived by employees is directly related to their innovative efforts.[250]

Conclusion

The above leads us to the conclusion that the differences between services and physical products may have implications for new service development. First, the difficulty to patent services prevents companies from investing resources in radical innovation because they can be easily copied. Thus, managers tend to pay greater attention to incremental innovation.

Second, due to its intangible nature, innovations in service industries are often non-technological, and require less or no R&D. The lack of R&D departments in service companies might give the impression that a formal NSD process is not needed. As a consequence, budgets for innovation are sometimes nonexistent. It has been proven however, that having one or more individuals with a specific responsibility for new service development brings advantages to the organization. By doing this, management ensures that innovation is a sustained and formalized process and that resources are made available for it.

Third, the overlapping ‘testing’ and ‘launching’ stages in new service development might become a problem. Delivering a service at the same time it is consumed forces companies to introduce new services on a small scale so as to test whether it operates correctly. By doing so, firms expect to identify problems and take timely corrective actions. The challenge arises when a new service is

introduced and it turns out to be unsuccessful. The difficulty and cost of withdrawal can be contra productive.

A final element that has been found, is the fact the front-line employees play an important role in service companies. Because of the nature of services, innovation is not only about “what” is being offered but also “how” the service is being offered. The way the service is delivered will ultimately influence the image of the organization. Front-line employees are also in position to influence customers’ decisions and perceptions. Therefore, selection and development of these people is an important task for managers in service companies.

Despite the existence of certain differences between innovation in service and manufacturing companies, we feel that many insights developed on innovation in a manufacturing context are equally useful in a service context. For what has been studied in this project we can conclude that many of the key factors for new service development are identical to the NPD process in manufacturing companies.

What is interesting is that some of the most prominent product leaders come from the service industry. The cases that will be presented in Chapter 4 illustrate that product leadership can be a viable strategy, also for service firms.

Introduction

In the previous chapters we described the broad set of actions that a company needs to take in order to become a successful product leader. In the following pages we present real life examples of companies that have successfully implemented these actions and have become product leaders in their industry. These service companies strive for innovation and aim to bring the best services to the market.

Eight companies have opened up their doors and showed how innovation is at the core of their organizations. In these cases, members of the top management explain the central role of innovation in their strategy, and describe the most significant actions they've taken to become a successful product leader. To be a product leader a company needs to do more than excelling in service innovation.

These companies are:

- Corona Direct
- Deloitte
- Google
- Habbekrats
- Netlog
- Trente Restaurant
- Studio 100
- VRT.

We hope these examples will inspire other managers (of service companies) to give innovation a more central position in their strategy.

CORONA DIRECT

Founded in 1931, Corona Direct is Belgium's largest direct insurance company. A subsidiary of the Belgian-French banking and insurance group DEXIA, Corona Direct provides customers with products such as car, fire, and property insurance.

Innovation and top management. "*Corona Direct plays in a difficult environment. Belgian customers are very traditional; they normally have a strong link with their insurance brokers which they are reluctant to break. This is why innovation is so important for us*", says Yvon Castrique, Managing Director of Corona Direct. "*We need to come up with products that encourage people to leave their broker and acquire our offerings directly.*"

Most insurance brokers offer a similar product portfolio. Therefore, the only way to differentiate from the others is by offering a cheaper price. This is the reason why Corona decided to be a rebel in this industry. Corona Direct opted to develop innovative products and thus aim for Product Leadership. *"In this industry you can't patent what you offer. For that reason we want to bring products to the market which cannot be easily copied or which are not attractive for copying"* explains Yvon.

This reasoning led Corona Direct to create the "Kilometerverzekering" or "Insurance per Kilometer". This insurance allows the customer to estimate the number of kilometers he/she drives per year. On this basis Corona Direct calculates a premium. At the end of the year the customer will inform Corona of the real amount of kilometers driven. If the person drove less than the estimated he/she will get a refund. In the other case the driver pays an extra amount. "*Competition has not been able to copy this product"* explains Yvon. "*They normally have a large portfolio of car insurances and to introduce something like we offer would mean the cannibalization of their existing products*".

From ideas to products. There are 150 people working at Corona Direct, from whom 100 work at the contact centers serving the customers every day. These employees also gather feedback from the market and report it to their coaches. These reports are analyzed together with the product managers during the product committees which are held every month. All departments are represented in the product committee. The objective of these meetings is to analyze the performance of the current products.

Moreover, idea generation and new product development is also part of the agenda. When an idea is considered as interesting, the product managers will do a deeper research and present a proposal to the Managing Team. If the result of the review is positive, the project will be included in the business plan for the following year, and the necessary resources will be allocated.

Radical innovation is not an easy process in the insurance industry. "*There is still the legal aspect to which we need to comply, and this can take long,*" says Yvon. *"However, we do everything we can to reduce our lead times and bring the products to the market as fast as we can. Incremental innovation goes faster because we are committed to innovation. We are very open to change and improvement in our current portfolio. In fact we draw the IT plan for the next two years, but we review it every 3 months. We do this to make changes for incremental innovation. We don't have a problem with changing our priorities if this helps to improve our products.*"

Resource allocation and commercialization process. In terms of investment on innovation, Corona Direct does not allocate a specific amount per year. Resource allocation mainly depends on the projects in the pipeline. If the managing team believes in an idea, they will launch a study and determine the resources to be allocated to this project.

An idea that followed this process was the "health insurance for dogs". The Corona Dog Insurance covers vet costs (except vaccinations) for the pet in case of sickness or an accident (radiographs, scans, etc). Corona Direct refunds costs up to €3.500 depending on the formula chosen by the client. To develop this product, the Managing Team appointed a number of people from different business units to be part of the development team. The main criterion to be part of this team was that the employee had a dog.

"*You can only see the benefits of this product if you identify yourself with the target market. By selecting these employees as part of the development team, we made sure that the product would perfectly suit the dog owners,*" explains Yvon. *"To minimize the risk when introducing the product, we launched it on a small scale. We didn't do much publicity and we made it available only for the Dutch-speaking community. We haven't fully automated the process yet; some elements of the process are still done manually. It takes longer for us, but in this way we make sure to improve the product before we make the official launch nation-wide"*.

Human resource management. Corona Direct believes that innovation and creativity is fostered by having a good mix of employees with different backgrounds. They have three product managers who do the research about the trends in the market around the world. Two of them have broad experience in the insurance industry; the third one has a completely different background. This mix forces them to challenge each other and therefore to create different products. The background of the people working in the commercial department, who also are looking for new trends, is also very different.

This way of thinking is applied throughout the organization and the managing team is not an exception. Out of the six people at the top, the managing director and the commercial manager do not have a broad experience in this industry. "*We seek for the right mix of academic and business background,*" explains Yvon. "*It is important to have people who know how this industry works. However, to bring innovation to life it is necessary to inject different ideas as well, and this is achieved if you introduce diversity in your teams".*

Diversity in the workforce mainly is found at the junior levels. Yvon Castrique believes that this is the key for creativity and innovation. *"Otherwise innovation is just theory."*

DELOITTE BELGIUM

Deloitte is the professional services firm in Belgium. More than 2,400 people in 12 offices across the country serve public and private enterprises with financial, legal, tax, management and information technology expertise.[251]

Top management and innovation. Deloitte differentiates from the competitors by offering the best services to the market. Hence, the company has realized the importance of innovation to achieve this objective. "*Innovation is important to continue growing,*" says Sam Sluismans, Innovation Director at Deloitte. "*Nowadays, the 145 partners in Belgium have placed innovation at the top of the agenda, not only because it helps us to be more client-centric but also because it drives us to be truly multidisciplinary.*"

The partners, led by the CEO have created a sense of urgency throughout the organization, and started a campaign to structurally embed and raise the level of innovation into the Deloitte organization. They are encouraging employees to actively participate in the creation of new services. *"Deloitte Partners have always been using innovation and entrepreneurship to put new and better services into the market. In the past however we were struggling to disseminate the concept of innovation throughout the firm. The difficulty lied on defining what innovation was and what it could do for all of us, but finally we have found the answers to those questions and all of a sudden innovation has turned into something more tangible and structural for everyone in our organization,*" explains Sam Sluismans.

By defining what Deloitte wants to achieve by being innovative, management has been able to decide in which areas they want to innovate. Since then, Deloitte has been able to manage its innovation portfolio more efficiently. Management looks at the entire portfolio of ideas and uses this information to analyze whether all the projects are aligned with the strategy and whether there is a balance between radical and incremental innovation. By looking at the portfolio, management is able to align the product roadmaps to the strategy and is capable to allocate resources more efficiently and effectively. Currently the partners are looking at investments around 50 percent on projects that defend the core business, 30 percent on projects that extend the core and 20 percent on projects that represent future growth opportunities.

From ideas to products. Deloitte creates a culture that encourages people to take risks and to try new things. "*You don't become a partner if you don't have an entrepreneurial track record. Taking a calculated risk developing a service and proving that it is successful in the marketplace is needed to become a partner but the role of the rest of our people and of our organization in this innovation process was less defined,*" says Gert Vanhees, Partner at Deloitte (and leading the services with regard to innovation management).

This is the reason why Deloitte is now structurally embedding into the organization the process of idea generation and the process of turning ideas into real services. To achieve this and to engage all our people, three campaigns are being launched by the top management: a fresh ideas campaign, an organized ideation and a co-creation campaign. The intention behind these campaigns is to encourage employees to share their bright ideas with the rest of the organization. The way to do this is to enter the ideas in a portal which has been set up specifically for this purpose and where they are evaluated by members of the innovation board.

The innovation board is composed of a group of people that includes the CEO and representatives from different business units and industries. The ideas are evaluated by one or more leaders. The evaluation depends on the type of the idea and the required feedback from the specific representatives of the Business Units. Once the idea has been pre-selected, the owner is asked to develop a Business Case that gives a clear view of the potential business opportunities as well as the potential risks. If the case is approved the next phase is the development of a business plan, which shows the investments and forecasted returns. When the final acceptance is given, the management will allocate the necessary resources (time, money and people) to bring the new services to market.

In order to generate new ideas, Deloitte also encourages brainstorming sessions. Strategic or Ideation workshops are organized in order to bring people together from different Business Units and Industry Groups to look at the services that Deloitte is currently rendering and to exchange views on the evolution of the markets. The aim is to generate innovative ideas that lead to innovative products that can fill the gaps created by the expansion of business of its clients.

When selecting the ideas, the innovation board gives preferences to projects that are client-centric and multidisciplinary, because these type of projects match the strategy that Deloitte is pursuing. "*In the service industry it is very difficult to get intellectual property. For this reason, it is important to make sure that the solution you bring to the market cannot easily be copied. Competition cannot easily copy us if they don't have the knowledge or the skills to replicate a specific product. This is why we create services that require a wide range of skills from throughout our multidisciplinary organization,*" explains Gert Vanhees.

Performance and incentives. Deloitte believes in "you get what you measure." Therefore the company has created KPIs to measure innovation. "*We want to know what the growth of the past year has been and what percentage of this growth comes from innovation,*" says Sam Sluismans. At the employee level we want to know "*what has been the contribution of employees during the last year regarding innovation.*" Those who can prove they have an entrepreneurial spirit and demonstrate that their initiatives have been successful, receive internal recognition and will also be rewarded for these ideas. This is a key element to promote people and it is certainly a requirement for those who would want to become a partner. In order to motivate people to work on new ideas, Deloitte adapts the other KPIs and expectations for someone who is working on an innovative project.

Knowledge sharing. Deloitte, due to its business definition, is a company that constantly generates knowledge. It is therefore a challenge to share this knowledge within the organization. "*There is an intense flow of communication, anyone is free to talk and discuss different topics with others. We also have databases and wiki's where we store information and reports. We have e-rooms and forums where we exchange opinions,*" says Sam Sluismans. To disseminate knowledge Deloitte organizes seminars and conferences. On the other hand, to acquire knowledge from the external environment the company organizes partner meetings with organizations such as: Vlerick Leuven Gent Management School, VOKA, universities, industry federations and others.

By seeking new ideas from external sources, Deloitte proves that innovation can be driven by internal and external forces, and shows that a successful company not only needs to look inside their walls to see what they can do better, but it can also open boundaries and cooperate with others in the development and the delivery of the new services so as to create services that have never been seen before.

GOOGLE

Google is recognized as the number one search engine in the world, due to its simplicity, precision and speed in delivering search results.

Innovation and top management. "*Innovation is at the core of Google, I feel it is our reason of existence,*" says Julien Blanchez, Country Marketing Manager at Google Belgium. "*When you start working at Google you receive a letter from the founders describing what the priorities for Google are and what is expected from you. The letter explains amongst other things that you need to engage in activities that are related to innovation. As Googler you have the conviction that money is just a means to an end, and this end is to make the world a better place,*" explains Julien.

Google's mission "*Organize the world information and make it accessible*" is lived and believed by all Googlers, from the top management to the last person in the hierarchy. Management is fully committed to innovation and sets systems in place to encourage it throughout the organization.

Idea generation/From ideas to products. When someone has an idea for a new product, (s)he can send it to a company-wide suggestion box. The person that submits an idea needs to explain which departments will be involved in the development and what the impact for the organization will be (local or global project). This suggestion box is reviewed regularly by any Googler that wishes to subscribe to this process. Whenever Googlers see one that holds potential, they rate it with a high vote. The best ones are sent to experts for further evaluation. Google believes in the "wisdom of crowds." This is how an idea can be enhanced with feedback from others. In certain instances, the selection process of projects requests that the owner makes a 3 minute video about the concept which is presented to a selection committee. If the project is accepted the owner is allocated the number of people required and the necessary resources to design the prototype.

Google believes that the customer is the ultimate judge of the products. This is the reason they always launch early and ensure they collect solid and quantified feedback from the customers. *GoogleLabs* is an online site where customers can test the new products and give feedback about them. Based on this, the engineers involved decide whether the product will make it to the market or whether it needs to be killed. This saves time and money for the team, who is able to focus on the specific requirements of the customers in order to launch a quality final version. "*Focus on the end customer and all the rest will follow,*" says Julien.

Resource allocation. Technical employees are required to spend 80 percent of their time on their core job and 20 percent on the projects of their own choosing. This is how Google budgets innovation into the job descriptions.252 More than 50 new products resulted from Google engineers' 20 percent time investments among which include Gmail, AdSense and Google News.

Knowledge sharing. Many companies struggle to share knowledge, especially when they are corporation with more than 20.000 employees around the globe. For Google this is not an issue; every Monday each person in Google is asked to update their personal profile with three or four bullet points explaining his/her objectives for the week. This information is stored in a database which

can be easily accessed through an internal search engine. When someone looks for information regarding a specific topic, he/she can easily find the people who have the knowledge and the experience needed. This helps people to connect to each other and team up for the development of new products.

Google strongly encourages employees to write reports after the end of each project indicating whether these projects were successful or not. In this report the project manager needs to answer questions like: *What went well? What didn't go well? How did we react?* When starting a new project, this information is useful in order to avoid mistakes and to reduce risk.

Google also fosters knowledge-sharing in an informal way. "*At Google we are encouraged to share everything; to share is to gain*", says Julien. "*Anything that we consider interesting or useful for others is shared. We make videos and post them, even if they are not work-related, they can be videos about cooking or about any other topic.*"

Innovation performance indicators. As many other product leaders, Google measures everything they can in order to evaluate the acceptance of the products in the market. They are able to see how many customers are affected by the introduction of new products and use the feedback so as to improve. According to Julien Blanchez, this helps to take rapid action and respond to what the market wants.

Performance and incentives. Rewarding people who come up with innovative ideas is very important at Google. People who show initiative and creativity are socially recognized. "*When you developed a good product or lead a successful project, you are invited to give a presentation about it. By doing so, people get to know who you are, and identify you as the creator of a specific success. You might not receive anything tangible (except a nice certificate) but the best reward is to be recognized for your efforts in front of others*", explains Julien.

Organization culture. Google looks to hire a mix of people who are creative and out-of-the-box minded, but also people who are process-oriented and possess strong analytical skills. The selection process can be very long at Google: "*Mine took 6 months*", explains Julien. "*You have a number of interviews with different people in the organization. In this way they try to discover your passion for the company and for its mission. You need to show that you believe in technology for the sake of innovation. Moreover, you need to demonstrate that you can work in a team and that you would fit in our culture*", says Julien.

When asked, Julien described the organizational culture as "*Googly". "We have a culture that is fun, respectful, flexible, ambitious but also very demanding. We encourage each other to take risks and not to be afraid to try new things. If you have an idea, people around you will help you to enhance it, and you will always find people willing to help you develop it."*

HABBEKRATS

The creation of Habbekrats dates back to 1991, when Chris van Lysebetten, a chemist employed at Procter & Gamble, decided to leave the business world and focused his attention on the creation of an organization that would give young people a place where they could have fun and stay out of trouble. Eighteen years later, Habbekrats has grown from a local organization to a well-known entity recognized in Flanders and even in some places in Wallonia.

The slogan of Habbekrats "Doe iets voor de jeugd" (Do something for the youth), tells us that the focus of the organization hasn't changed throughout the years. Their target group is the youngsters whose families cannot afford to send them to activities such as the "Boy Scouts" or others. Habbekrats creates activities bound for young people at the reasonable price of €5 per year. This membership gives them access to the weekly activities and the games that Habbekrats hosts regularly. These games and camps are created around an adventure theme without leaving out the educational focus. "*We create missions where the youngsters need to compete in order to become the hero*", says Peter Symons, pedagogue at Habbekrats.

Innovation strategy. "*Innovation is the motor of our organization. We never do the same activity or camp twice. The concepts, stories and missions always change; therefore it is our job to come up with ideas all year round*. *Every person working in this organization is in charge of creating something new for the youth. To do this we communicate efficiently and give feedback to each other, but the final decision is always taken by the project manager or the idea owner, who is charged with the responsibility to bring the idea to life,*" says Peter.

Once a month, the entire Habbekrats team gathers to discuss different topics. In these meetings they brainstorm about new tendencies and exchange ideas about what is popular between the youngsters and how they can create new activities based on that information. "*We also share experiences on what we learned from previous activities*".

Habbekrats does not have a big advertising budget. That is why they rely on mouth-to-mouth publicity and why they try to get in the media as much as possible. They also send out thousands of e-mails in order to communicate their activities.

Human resource management. When hiring people, Habbekrats looks for the following characteristics: positive, creative, out-of-the-box-minded, able to work under pressure, be physically fit (for the outdoor activities) and with a personality that fits the team. As any other Product Leader, they do not discriminate in terms of background or age, they only look for people who would enjoy working with young people, and who understand that their job makes a difference. What Habbekrats looks for in its employees is that they have a "passion for youth."

NETLOG

Like many other internet-based companies, Netlog, a social networking website, was born in a student room. Back in 1999 Toon Coppens, a computer science student in Gent, spent time in front of his computer getting to know people through chat rooms. By doing this, he realized that the most frequent questions people would ask where: How old are you? Are you a girl or a guy, where are you from, and where are you now? This is how Toon got the idea of developing a site where people could create their own profile with this and other types of information (hobbies, interests). The site would also allow sharing news, pictures, videos, etc. Toon Coopens believed that by doing this, he would help others to meet people with the same interests.

In 2003, Lorenz Bogaert saw the business opportunity and decided to invest in Toon's idea. Together they founded Netlog. Six years later, the Gent-located company has become one of the fastest growing companies in the Benelux and is the two-year-in-a-row winner of the "best website award" given by MetrixLab (one of the world's leading online market research companies) in the category "Best Community Site."

"*Our main differentiator is that we are an online platform where users can extend their social network*", says Cedric de Vleeschouwer, Strategic Partnerships Manager at Netlog. "*We are an online social portal that targets the European youth. We focus on young people in the 14-24 year range. We offer them an online hide out, where they can meet people with the same interests and hobbies, play games, post pictures, or simply express themselves. We pay great attention to developing on-line gaming for this niche market, which is an activity that our target group enjoys a lot. Another characteristic of ours is the focus on localization. An example of this is our French website; we do everything we can to make it appear completely French. People don't even realize that it is actually a Flemish company that is hosting the site. We translate as much as we can, and make sure that the content (videos, games, features) are in French. We believe that to grow and be accepted in Europe it is important to take into account the cultural differences between the different countries. This is the reason we try to adapt our content to each of them".*

This way of thinking has made Netlog the main social networking site in Europe with more than 54 million users. The site is currently available in 20 different languages.

Innovation and top management. Same as for any other product leader, innovation is extremely important for Netlog. "*Innovation is what drives our company*. *We are in a constant and proactive search for new business models, new products and new ways to impress our customers,*" says Cedric. "*Every person in the organization understands the importance of innovation for the company. From the partners to the last person in the hierarchy ladder, we all know that our business depends on it*".

From ideas to products. Netlog constantly implements small (incremental) innovations for the website. This constant flow requires little or almost no formal decision making process. For projects that represent radical innovation, the ideas follow a formal procedure before they have the green light for development. First, the owner of the idea will communicate it to her/his business unit manager, who will analyze it and give the authorization for the development of a business case. Once this

has been done, the business unit manager will present and defend the idea during the Managing Committee meeting which is held once or twice a week. The Managing Committee is composed of the CEO, CTO, VP of Engineering and Business Development Manager. During these meetings they discuss different topics which include the creation of new product, features and the search of new business opportunities. If the idea is approved, the idea-owner will receive the necessary resources to develop the project and bring it to live.

"Measure to improve." "*In this industry there is no time to be wasted*", says Cedric. "*The longer you take to bring new products to the market, the easier the customers will turn to our competitors*". This is the reason Netlog needs to do everything they can to reduce their time-to-market. "*One of the advantages of being an internet-based company is the fact that we can measure everything*. *We can track the impact of each of our new products and features. We can check what is hot and what is not, what can be improved and what needs to be replaced. This helps us to improve our product and gives us guidelines for creating new ones*".

Organization culture. The culture at Netlog is described by its employees as informal and flexible but also very demanding. "*We expect people to perform at a certain level*. *We are very flexible and understanding but we expect the employees to be the same with the company".* When hiring new personnel, Netlog looks for people who have an entrepreneurial spirit, who are flexible, out-of-the-box minded, creative and willing to work hard. Netlog has around 100 full-time employees in Belgium, and yet they consider themselves a 'big family'. "*It is quite normal here that people hanging out at the cafeteria after working hours, as it is relaxing at the recreation areas with a football table,and playstation games,*" says Cedric. Netlog believes that allowing people some time to relax helps them to be more creative. To create the feeling of a big family, Netlog organizes an annual ski trip where all employees come together for 4 days. At the same time, once a month they all go for drinks paid by the company. Netlog wants its employees to come up with fantastic new products that revolutionize the industry, and to achieve this Netlog encourages them to spend time together so they can exchange ideas and views.

STUDIO 100

Studio 100 is the largest and best known provider of family and children's entertainment in the Benelux. The company exploded into existence in 1996 and has enjoyed a meteoric rise unparalleled in the history of television. Studio 100 has come to dominate the domestic market in every aspect of children's entertainment. In the meantime, the company is expanding rapidly into the international arena. Key to their success is content expertise and a vast know-how in various entertainment areas.

Studio 100's core product is content – the production and development of characters, such as 'Samson & Gert', 'Plop the Gnome', 'Pirate Pete', 'Spring', and many others. The content is delivered through various formats, such as television, theater shows, movies, DVDs, merchandising, licensing, publishing, musicals, website, theme parks, audio, and production facilities. Although some of these characters have been exploited for many years, the company keeps growing. The growth is achieved by introducing new characters, and by exploiting the existing characters in new formats. For example, when the girls band K3 reached a saturation point with their music, Studio 100 created a musical, *'The three piglets'*, starring the three girls from K3. This gave a new boost to their career.

Innovation and top management. Innovation and creativity are at the core of Studio 100's business model. Hans Bourlon, the co-founder and one of the two top managers explains: *"You shouldn't always be looking behind you, trying to make your new programs a copy of their successful forerunners. You will never find good, innovative ideas from market research. For real success you need new concepts which open up new horizons. People are always happy with the familiar. Our creative impulses are often beyond logic, beyond rhyme or reason."*[253]

Studio 100 does not only develop new characters and formats for the children, but also addresses new segments. With the musical 'Daens' Studio 100 targets an adult audience. All these moves are very natural for the company. And this natural drive towards doing new things comes from an unbelievable passion for entrepreneurship, creativity, and innovation.

Idea generation. Gert Verhulst and Hans Bourlon see it as their major task to push creativity down in the organization. Although both managers are still heavily involved with the new projects, they 'manage' new ideas rather than 'developing and creating' the ideas themselves. This means challenging the people, providing feedback, giving advice, and coaching. One could say that the managers lead creativity.

Leading creativity means detecting and recognizing strong ideas and promoting them within the company. *"It goes without saying that we are always open to new ideas, although it is obvious that in first instance people are expected to do what we pay them for. But overall I think that people with great ideas have the opportunity to develop them. For example, our cost controller has developed a new quiz program. And the guy who develops our websites has produced a board game,"* says Hans Bourlon.

Gert Verhulst and Hans Bourlon stimulate people to generate and work out ideas in team. The marketing department of Studio 100 plays a very important role in this process. In many media

companies, the marketing department is a separate entity, cut off from the creative process. At Studio 100, the two sides have to work together. Creative ideas are only supported when they can be commercialized.

Organization culture. Stimulating creativity is above all providing the people with a warm nest, an environment that gives them the possibility to slowly rise and shine. The management team of Studio 100 sees this as one of their major tasks: *"We, as an employer, have to create that environment and above all, need to mingle with them."* There's a lot of energy going round at Studio 100. Very often, you can hear music in the corridors: an orchestra's rehearsing, there are ballet lessons or some of the characters are learning new songs.

"Indeed, there are some offices in our buildings, but most of the space goes to studios, rehearsal rooms, ballet rooms, and the clothing department where the costumes are being made. On the tables, you will find models of our theme park attractions or scenery. And rhyming dictionaries are more commonly used than calculators. At noon, our restaurant looks like carnival. Pirates, gnomes, piglets and mermaids are all sitting at one table. And while we're having lunch, new ideas bubble up. We have flexible working hours, we organize two times a week power yoga, we have three quiz teams and every Monday evening we go swimming. The real writing often takes place late in the evening, in groups and certainly not in suits. In short, the classic 9 to 5 clerk isn't around at Studio 100."[254]

In Studio 100, the command-and-control style has given way to a 'softer control' with more emphasis on output control. One could say that control is primarily done through creating an appropriate culture in the organization, a culture built around creativity and informality. That is why Studio 100 pays a lot of attention to attracting the right people. In a fast-growing company, the question whether you have the right people is a vivid one.

"What we need is happy and committed people. There is a deliberate choice not to attract famous actors for a particular character. The total picture should be right. You just can't play Pirate Pete for one year, earn a lot of money, and then leave the company. We look for a special type of people. One great example is Free Souffriau, who plays Mega Mindy. Free comes from our ballet school, so we know her quite well. She has the right mindset, is collaborative, but she is patient. She understands that she will get many chances here. We've agreed that Free will play Mega Mindy for 10 years, which is a very long time. But at the same time, we offer her a leading role in our musical Daens, and we offer her the chance to develop a music career. It is all about giving and taking. That is how we manage our success."

Everybody in Studio 100 gets a fixed pay, even the sales people. This is a quite conservative rewarding system, yet it focuses on the equal importance of all factors in the creation and sale of qualitative products.

Organization structure. Creative companies stimulate imagination and out-of the box thinking, which implies a certain chaos in the organization. Studio 100 is no exception. It has quite a flexible and fluid organization. This is mainly due to the creativity process that runs across the organization. This creativity process addresses resources and invites participation throughout. It should be remarked that it appears to be controlled chaos as there are constantly creative cells present. These

creative cells create new characters and monitor the correct interpretation of and alignment with the character over all different departments (such as the TV department, the merchandizing department, the theatre department, etc.).

Both the creative cells and the vertical departments have a direct link to the executive management team. This makes decision lines very short as departments and creative cells are equally ranked. This results in a balanced organization and makes every department or cell equally empowered by management. This structure also offers the best guarantees that the main ideas and philosophies of the top are transferred to every part of the organization.

Says Hans Bourlon: *"We constantly question ourselves and what we create. If there's a paper lying on the ground at one of our theme parks, we pick it up. When a performance of one of our musicals or a TV program wasn't that good, we are disappointed. As long as we can keep that attitude, we're safe."*

TRENTE RESTAURANT

"Innovative cuisine in the center of Leuven".
"Each plate is a piece of art and the service is impeccable".
Customer Reviews in TripAdvisor.

Four years ago a small Restaurant in Leuven called "Oesterbar" had to close its doors when a tragic accident befell the owner. Having been left without a job, the chef of Oesterbar, Kwinten de Paepe, decided to take the plunge and open his own restaurant in a building located just across the road. Four people followed Kwinten and TRENTE was created. Now, TRENTE has become one of the best- known restaurants in Leuven and is described by its customers as "culinary heaven."

One of the reasons why TRENTE is recognized is because of its innovative cuisine. TRENTE is one of the few restaurants where the menu is changed once a month. "*Innovation is an automatic thing*", says Kwinten de Paepe. "*We come up with new dishes every month, but not just any dish; for us every meal has a story behind it, a reason for existence and that is something that you cannot copy, that is something that you need to create by yourself*". For TRENTE innovation is a non-stop process. Every month depending on the season and the ingredients available they explore new combinations in the aim of creating things that people haven't seen before. "*We want people not to be able to recognize the food, we want to be the first with a trend and we want others to copy us*".

Idea generation. Ideas for new dishes are formed by relying on the input of TRENTE's employees, contact with other chefs, online research and also from different kind of books such as: science, culture, art and cooking. This is how Kwinten found out about "food pairing". *Green apples, celery and mustard have the same molecular composition,"* he says. "*That is the reason why they go so well together when you mix them. This is called "food paring" but not many chefs know that there is a science behind it and that you can create exciting new tastes when combining foods that have major flavor components in common".*

To create the best you also need the best ingredients. TRENTE works only with reliable suppliers who offer the best ingredients in the market. Kwinten and his team plan the changes in the monthly menus three months in advance, which allows time for the orders to be placed on time. At the same time, although there is no specific monthly budget allocated to innovation, the spending on new machinery or tools is foreseen and consequently the money for it is set aside.

"To create a new menu you need a lot of communication," says the chef. Many ideas are exchanged on a daily basis but it is Kwinten who evaluates them and makes the final decisions concerning which dishes will go in the new menu. As any other innovative company, before introducing the new products, a test is required. Hence, new dishes are served during lunch time in order to observe the response of the public and to see what small changes can be made to improve the process and the final product. When the final adaptations are made, the dish is also introduced to the dinner menu. TRENTE does not invest in commercialization. *"Mouth-to-mouth publicity is the best advertising,"* says Kwinten. He believes that offering the best product and the best service is an advertisement by itself. They also rely on the positive reviews by the press, and thus they are open to participate in any interviews that keep them in the public eye.

Organization culture and structure. The organization culture in TRENTE is very special. It was very interesting to find that 40 percent of the employees at the restaurant did not go to a cooking school. Kwinten who has a degree in Nutrition and Diet always had a passion for food and he likes to work with people who share the same passion, no matter their background. This way of thinking led him to hire medicine, history and philosophy graduates, just because they all had a "Passion for Food". Although Kwinten has also hired people who have cooking background, he believes that having a diverse environment helps creativity to flourish, because people challenge each other and therefore come up with better ideas.

"There is no hierarchy. I'm the boss but I do everything that is needed, even jobs that are not nice to do," he says. Because of this, people are able to communicate their ideas freely, share experiences and give feed back to each other.

Kwinten has already made known his wish to go bigger in 2 years, and to judge for TRENTE's current performance we cannot do more than eagerly anticipate the big day.

VRT

The Vlaamse Radio en Televisieomroep (Flemish Radio and Television Network), or VRT is a publicly-funded broadcaster of radio and television in Flanders. The VRT (formerly known as NIR, BRT, BRTN) moved into the world of televised broadcasting in 1953 and was considered, up until 1996 "the Ministry of Broadcast."[v] In 1996 the poor situation of the public broadcast in terms of ratings, forced VRT to enter into fierce competition. Because of this, the VRT was transformed into a media company (though it is still a public broadcasting organization, it has a structure and management similar to a private entity).

The VRT's objective is to "*reach a broad audience with a range of programs which excite and satisfy the interest of viewers and listeners*"[255]. Nowadays VRT is the undisputable leader in the market in Flanders. With three TV stations (Eén, Canvas, Ketnet), six radio stations (Radio 1, Radio 2, Studio Brussels, MNM, Klara, RVi), the news department and the internet department, VRT reaches wide audiences as well as certain target groups by creating distinctive radio and television networks and by offering high-quality programming.[256]

Innovation and top management. "*Innovation is a daily duty*" says Siegfried Bracke, chief editor of VRT news. "We *would be dead if we didn't innovate. There is no program that can be popular forever*. *People get easily tired and bored with the same programs, so it is our duty to reinvent our portfolio as the only way to remain the market leader".* VRT invests in both radical and incremental innovation. The changes made to programs can vary from changing colors or decoration in the studio to creating something that has never been seen before.

"Creating programs that fit in the portfolio." VRT has a strategy department that manages the portfolio. This department makes sure that there is a good mix or balance of the programs (not too many programs of the same kind), and that they are focused on the right target group. This input serves as a guideline for ideas pre-selection. Collecting ideas in VRT is an easy and open process. "*We gather them from anywhere in the organization. No idea is too wild or crazy, we want to hear them all,*" says Siegfried.

The selection and screening of ideas is made by the production, media and technical department. "*We listen to what the strategy department has to say in terms of target group and type of program needed. We sit together and go through the ideas; this is the starting point. From here brainstorming sessions follow in order to give shape to the idea, analyze the feasibility of creation and finally come up with the exact definition of what we want to produce*".

After this, a focus group is invited to judge the definition of the program and to give feedback that helps to re-define the details, or to completely change the concept of the program. The next step is to create a sample and then test it with people that belong to the target group (e.g. bring children together to judge children programs). To evaluate the impact of the program on the audience, a team observes the focus group and analyzes the behavior and reactions while they watch it. When this has finished, interviews with the test viewers are carried out in order to get feedback on the program.

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v Up until 1988 the public broadcast had a monopoly. Commercial radio or television was against the law. From 1989 onwards the television monopoly was broken by VTM (Vlaamse Televisie Maatschappij), a commercial broadcaster.

“Measuring the audience’s response.” VRT relies on the ratings to evaluate the success of the programs (on two levels: market shares on the one hand; appreciation rates on the other). These are available every day and can tell a lot about how the program was perceived by the public. When the reaction of the public is not as expected, VRT redefines the program or changes it for a new one. VRT does not have a blaming culture. Instead, people are encouraged to learn from the mistakes and try harder the next time.

Organization culture and structure. Regarding the opportunities within VRT, Siegfried described how the HR department manages the training portfolio. “*There are a vast number of trainings listed*”, Siegfried explains. *“You can choose the training you want to follow even if it is not related with what you do. I followed language courses at the beginning of my career; this gave me the chance to learn about copywriting which is a very useful skill in this industry. I followed a negotiation course and I was even asked to train as a fire-fighter at a fire station some time ago”*.

VRT encourages employees to follow any kind of training because this fosters creativity, networking and helps innovation to flourish. In order to improve communication, VRT has implemented the ‘landscape concept’ in their new offices. This means getting rid of the walls that divide departments which in a way also divide people. In the new buildings everybody sits together in an open space where there is no distinction of ranks. Managers sit together with the rest of their team. “*This has helped to improve communication within teams but also between departments*” says Siegfried, “*we work more as a big team now, it’s a great step from what it used to be.”*

To promote networking and with it the generation of new ideas, VRT built a big cafeteria that has room for more than 1000 employees to have lunch together. In this big space people have the chance to meet each other and exchange ideas about new programs. At the same time each floor in each building has a kitchen and open spaces for coffee breaks. Colorful sofas and tables decorate these spaces, and serve as areas where people meet for a cup of coffee or just to read the newspaper.

As many other organizations with an innovation-oriented organizational culture, VRT organizes company events to bring people together and to form bonds with each other. An annual barbeque is one of these events where more than 2500 employees attend. In smaller bases, departments organize team building activities and evening events.
The above mentioned items have shaped VRT into an innovative company that is leader in the market and which offers programs that the viewers consider as superior.

Product leaders are companies that dominate their markets because they continuously offer the *best and most innovative* products or services in their industry. These companies display the ability and determination to make products/services that customers consider superior and that deliver more benefits than others.

The Product Leadership tool is a benchmarking instrument that compares how well a company scores in relation to others in the same industry. It also shows how processes are set in the company in order to encourage innovation.

Who should fill it out?

Medium and large companies which:
- Strive for quality products/services.
- Innovate in order to offer better products/services than the competition.

Middle and Top Management:
- Can be filled out by one or more people.(the results are updated every time a new person fills it out).

The questionnaire

First part: As the Product Leadership tool is a benchmarking tool, we first ask you basic questions about your organization. This information enables us to place your company within the right industry and to compare it with the relevant competition.

Second Part: The questionnaire is divided in 5 dimensions. Each dimension contains 9 questions. The organization needs to positions itself on the following scale: Strongly Disagree, Disagree, Undecided, Agree and Strongly Agree

What will the company get?

The companies that participate will get a pdf document with the industry benchmarking and a benchmarking per question together with the explanation of how to interpret the results. It will also include a text with a short explanation of each dimension and a list of actions that the company can take in order to improve its performance.

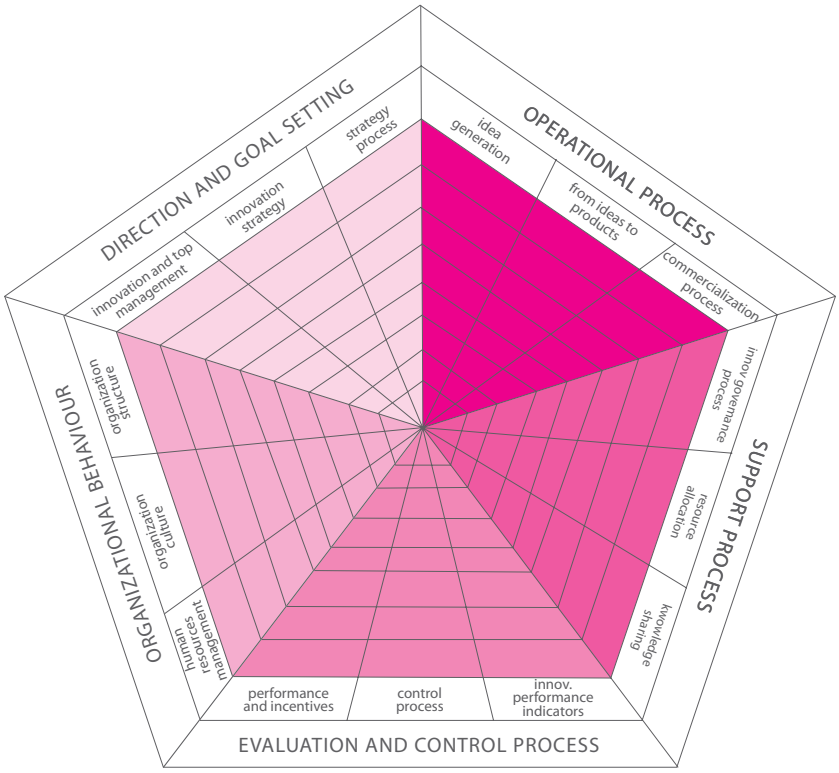
Why is it useful?

The results obtained help companies in any industry to:

- Identifies the strengths of the company.
- Identifies the areas where there is room for enhancement.
- Indicates the actions to take for enhancement.

A benchmarking result looks as follows:

Figure 15 Product Leadership Tool - results Company “X”



Fill out our questionnaire and see how well your company scores compared to other product leaders from similar industries: http://tools.vlerick.com/en/product-leadership-tool/

REFERENCES

1. Treacy, M. and Wiersema, F. (1993) "Customer intimacy and other value disciplines", *Harvard Business Review*, January-February, 84-93.

2. These figures were presented by Gary Hamel at the 21st Annual International Conference of the Strategic Management Society in his presentation "Building the Post-Industrial Firm" (San Francisco, October 22, 2001). The figures were based on S&P Compustat and Strategos calculations.

3. Crawford, F. and Mathews, R. (2001) *The myth of excellence: Why great companies never try to be the best at everything*, Crown Business, New York.

4. Ibid.

5. Treacy, M. and Wiersema, F. (1995) *The discipline of market leaders*, Perseus Books, Reading, MA.

6. Miller, D. and Whitney, J.O. (1999) "Beyond strategy: Configuration as a pillar of competitive advantage", *Business Horizons*, May-June, 5-17.

7. Kotler, P. and Armstrong, G. (2001) *Principles of marketing (9th Edition)*, Prentice Hall International Inc., Upper Saddle River, NJ, p. 299.

8. Ibid., p. 299.

9. Ibid., p. 299.

10. 1Karmarkar, U.S. and Pitbladdo, R.C. (1997) "Quality, class, and competition", *Management Science*, Vol. 43 (1), January, 27-39.

11. Kotler, P. and Armstrong, G. (2001) *Principles of marketing (9th Edition)*, Prentice Hall International Inc., Upper Saddle River, NJ, p. 300.

12. Bush, C. and Hwang, K. (2008) "Design that moves business: Apple's 'overnight' success", http://www.sramanamitra.com/2008/11/08/design-that-moves-business-apple%e2%80%99s-%e2%80%9covernight%e2%80%9d-success-part-1/ (website accessed on April 20, 2009).

13. Austin R.E. and Beyersdorfer, D. (2007) "Bang & Olufsen: Design driven innovation", *Harvard Business School case*, No. 9-607-016.

14. Pine II, B.J. and Gilmore, J.H. (2001) "Welcome to the experience economy: It's no longer just about healing: patients want a personal transformation", *Health Forum Journal*, September/October, 10-16 (2001). The main general ideas on the experience economy were described in: Pine II, B.J. and Gilmore, J.H. (1999) *The experience economy*, Harvard Business School Press, Boston, MA.

15. Schmitt, B. (1999) "Experiential marketing", *Journal of Marketing Management*, Vol. 15, 53-67.

16. Crawford, F. and Mathews, R. (2001) *The myth of excellence: Why great companies never try to be the best at everything*, Crown Business, New York, p. 136.

17. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester.

18. Kim, C. and Mauborgne, R. (2005) *Blue ocean strategy: How to create uncontested market space and make the competition irrelevant*, Harvard Business School Press, Boston, MA.

19. Treacy, M. and Wiersema, F. (1995) *The discipline of market leaders*, Perseus Books, Reading, MA.

20. Verweire, K. and Van den Berghe, L.A.A. (2004) *Integrated Performance Management: A Guide to Strategy Implementation*, Sage Publications Ltd., London.

21. Sarvani, V. (2004) "Innovations at Harley-Davidson", *ICFAI Center for Management Research Case*, ICFAI 304-103-1, p. 8.

22. Pawar, M. (2007) "Innovation at Cirque du Soleil", *ICFAI Center for Management Research Case*, ICFAI 307-353-1, p. 1 and p. 6.

23. Deschamps, J.-P. (2008) *Innovation Leaders*: *How Senior executives stimulate, steer and sustain innovation*, John Wiley & Sons Ltd, Chicester.

24. Biolos, J. (1996) "Managing the process of innovation", *Harvard Management Update,* November, 3.

25. Midgley, D. (2009) *The innovation manual: Integrated strategies and practical tools for bringing value innovation to the market*, John Wiley & Sons Ltd, Chicester, p. 203.

26. Topalian, A. (2000) "The role of innovation leaders in developing long-term products", *International Journal of Innovation Management*, Vol. 4 (2), p. 166.

27. Ibid.

28. Bylund, A. (2006) "Google buys YouTube", *Arstechnica*, October 9th.

29. Mourkogiannis, N. (2006) *Purpose: the starting point of great companies,* Palgrave Macmillan, New York.

30. Collins, J. (1993) "Sometimes a Great Notion", *Inc*, July, Vol. 15 (7).

31. Kets de Vries, M. and de Vitry d'Avancourt, R. (2007) "Cirque du Soleil: Attaining 'extreme creativity", *Insead business case*, No. 407-032-1, 1-7.

32. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester.

33. Ibid.

34. Ibid.

35. Ibid, p. 70.

36. Davila, A., Epstein, M. and Shelton, R. (2006) *Making Innovation Work: How to manage it, measure it, and profit from it*, Wharton School Publishing, Upper Saddle River, New Jersey.

37. Midgeley, D. (2009), *The Innovation Manual,* John Wiley & Sons Inc., Chichester, West Sussex, p. 70.

38. Darras, K., Debruyne, P., D'Haenens, A., Jans, P., Van der Beken, K. and Vinck, S. (2009) "What does it mean and what does it take to be a product leader: Televic case", *Assignment for Strategy Course Vlerick Leuven Gent Management School*, Vlerick Leuven Gent Management School, 1-16.

39. Davila, A., Epstein, M. and Shelton, R. (2006) *Making Innovation Work: How to manage it, measure it, and profit from it*, Wharton School Publishing, Upper Saddle River, New Jersey, 85-86.

40. Davila, A., Epstein, M. and Shelton, R. (2006) *Making Innovation Work: How to manage it, measure it, and profit from it*, Wharton School Publishing, Upper Saddle River, New Jersey.

41. Tushman, M. & Anderson, P. (1986) "Technological discontinuities and organization environment", *Administrative Science Quarterly*, Vol. 31 (3), p. 460.

42. Vandermerwe, S. and Taishoff, M. (2004) "iPod, iTunes, and Steve Jobs: Apple Driving Market Growth Through Technology", *Tanaka Business School Case,* No. 504-099-1, 1-25.

43. Sarvani, V. (2004) "Innovations at Harley-Davidson", *ICFAI Business Case*, No. 304-103-1, 1-18.

44. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester.

45. Mitsch, R. (1990) "Three roads of Innovation", *Journal of Business Strategy*, Sept.-Oct., Vol. 11 (5), 18-22.

46. Madapati, R. (2004) "Intel: Shaping the organizational culture", *ICFAI Center for Management Research Case*, ICFAI 404-086-1, p. 2.

47. Purkayastha, D. (2006) "Pixar's incredible culture", *ICFAI Center for Management Research Case*, ICFAI 406-077-1, p. 7.

48. Hamel, G. (1998) "The challenge today: Changing the rules of the game", *Business Strategy Review*, Vol. 9 (2), p. 23.

49. Ibid. p. 24

50. Ibid., p. 25.

51. Treacy, M. and Wiersema, F. (1995) *The discipline of market leaders*, Perseus Books, Reading, MA.

52. Kohli, A. and Jaworski, B. (1990) “Market Orientation: The Construct, Research Propositions, and Managerial Implications”, *Journal of Marketing*, Vol. 54 (2), p. 4.

53. Hamel, G. (2000) *Leading the revolution*, Harvard Business School Press, Boston, MA.

54. Prahalad, C.K. & Ramaswamy, V. (2000) “Co-opting customer competence”, *Harvard Business Review*, January-February, p. 81.

55. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester.

56. Deschamps, J.-P. (2008) “Innovation leadership in practice”, http://www.imd.ch/research/challenges/ TC051-08.cfm (website accessed on May 18, 2009).

57. Hurley, R. & Hult, T. (1998) “Innovation, market orientation, and organizational learning: An integration and empirical examination”, *Journal of Marketing*, Vol. 62 (3), p. 49.

58. Ibid., p. 46.

59. Subhadra, Dutta S. (2004) “Google’s Organizational Culture”, *ICFAR Business Case*, No 404-016-1, p 7.

60. Ost, B., Mason, A., Kolbe, B., Cuendet du Roy, S. and Lupu, I. (2009) “What does it mean and what does it take to be a product leader: Apple case”, *Assignment for Strategy Course Vlerick Leuven Gent Management School*, Vlerick Leuven Gent Management School, 1-18.

61. Mannarelli, T. (2001) “Unlocking the secrets of business innovation”, *Mastering People Management/Managing Creativity, Financial Times*, 29 October, 10-11.

62. Derry, T. (2004) “Idea Generation as Process”, Association *Management,* Vol. 56 (6), 51-55.

63. Cooper, R.G. (2004) *Product Leadership: Pathways to Profitable Innovation (2nd edition),* Basic Books, New York.

64. Ibid.

65. Belliveau, P., Griffin, A., Somermeyer S. (2002) *The PDMA Toolbook for New Product Development*, John Wiley and Sons, p. 360.

66. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester.

67. Austin, R.E. and Beyersdorfer, D. (2007) “Bang & Olufsen: Design-driven innovation”, *Harvard Business School Case*, 9-607-016, p. 7.

68. Cooper, R.G. (2004) *Product Leadership: Pathways to Profitable Innovation,* Basic Books, New York.

69. Cooper, R.G. (2004) *Product Leadership: Pathways to Profitable Innovation,* Basic Books, New York.

70. Barco n.v., (2008) "*Product Life Cycle*", Internal document (Confidential).

71. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester, p. 55.

72. Ibid.

73. Schilling, M. and Hill, C.W. (1998) "Managing the new product development process: Strategic imperatives", *Academy of Management Executive*, Vol. 12 (3), p. 74.

74. Zirger, B. and Maidique, M. (1990) "A model of new product development: An empirical test", *Management Science*, Vol. 36, 867-883.

75. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester, p. 55.

76. Sethi, R. (2000) "New product quality and product development teams", *Journal of Marketing*, Vol. 64, April, 1-14

77. Cooper, R.G. (2004) *Product leadership: Pathways to profitable innovation*, Basic Books, New York.

78. Sarvani, V. (2004) "Innovations at Harley-Davidson", *ICFAI Center for Management Research Case*, ICFAI 304-103-1, p. 8.

79. Purkayastha, D. (2006) "Pixar's incredible culture", *ICFAI Center for Management Research Case*, ICFAI 406-077-1, p. 8.

80. Wilson D. (2009) *Organizational Marketing*, Cengage Learning EMEA, p. 205.

81. Cooper R. (2004) *Product Leadership: Pathways to Profitable Innovation*, Basic Books, p. 189.

82. Ibid.

83. O'Connor, G., DeMartino, R. (2006) "Organizing for radical innovation: An exploratory study of the structural aspects of RI management systems in large established firms", *Journal of Product Innovation Management*, Vol. 23 (6), 475-497.

84. Barnett, M., Deschamps, J.P. (2005) "Logitech: Learning from customers to design a new product", *IMD Case*, No. 5-0679-T, 1-18

85. Canadian Corporate News, (2005) "Perfect Timing: Logitech Unveils Wireless Presentation Controller with LCD Timer", http://findarticles.com/p/articles/mi_hb5559/is_200501/ai_n23468069 (website accessed on April 25, 2009).

086. Robertson, D., Crawford, R., (2008), "Innovation at the LEGO group*", case IMD* No. 3-1978-V, p. 8

87. Prahalad, C.K. and Ramaswamy, V. (2000) “Co-opting customer competence”, *Harvard Business Review*, January-February, 79-87.

88. Sarvani, V. (2004) “Innovations at Harley-Davidson”, *ICMR Case* No. 304-103-1, p. 6.

89. Robertson, D., Crawford R, (2008), “Innovation at the LEGO group”, *case IMD* No. 3-1979, p. 7.

90. Lorsch, J.W. (2001) “McKinsey & Co.”, *Harvard Business School Case*, 9-402-014, p. 7.

91. Strid, S., Andreasson, C., (2007) “Build a Global Brand without advertising”, www.vikingmanifesto.com/Resources/creativematch_(070809).pdf. (site accessed on April 27, 2009).

92. Barnett M., Deschamps, J.P. (2005) “Logitech: Learning from customers to design a new product”, *case IMD* No. 5-0679, p. 5.

93. Austin, R.E. and Beyersdorfer, D. (2007) “Bang & Olufsen: Design-driven innovation”, *Harvard Business School Case*, 9-607-016, p. 3.

94. Ibid., p. 4.

95. Bartezzaghi, E., Corso, M., Verganti, R., (1997) “Continuous improvement and inter-project learning in new product development”, *International Journal of Technology Management*, Vol. 14 (1), p. 116.

96. Nobeoka K, (1995) “*Inter-project learning in new product development*”, Academy of Management Proceedings, 1995, p. 432.

97. Tidd, J., Bessant, J. and Pavitt, K. (2005) *Managing innovation: Integrating technological, market and organizational change (3rd edition)*, John Wiley & Sons Ltd., Chicester.

98. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester.

99. Newell, S. (2004) “Enhancing Cross-Project Learning”, *Engineering Management Journal*, Vol 16 (1), 12-20.

100. Sowards D. (2005) “The value of post project reviews” *Contractor Magazine*, Vol 52 (8), 35-36

101. Sarvani, V. (2004) “Innovations at Harley-Davidson”, *ICFAI Center for Management Research Case*, ICFAI 304-103-1, p. 9-10.

102. Von Stamm, B. (2008) *Managing innovation, design and creativity*, John Wiley Sons Ltd, Chicester.

103. Petit, G., Delafortry, B. (2009) “Innovation at Alcatel Lucent: Some Bad and Best Practices”, *Dexia Lead an Organization Programme,* Edition 6, Module 3.

104. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester.

105. Treacy, M. and Wiersema, F. (1995) *The discipline of market leaders*, Perseus Books, Reading, MA.

106. Collins C, (1999)"Optimal Resource Allocation for Projects", *Project Management Journal*, Vol. 30 (2), 22-31.

107. Yoshimura, M., Fujimi, Y., Izui, K., Nishiwaki, S. (2006) "Decision-making support system for human resource allocation in product development projects", *International Journal of Production*, Vol. 44 (5), p. 832.

108. Rice, M.P., O'Connor, G., Leifer R., McDermott C.M., Standish K. (2000) "Corporate Venture Capital Models for promoting Radical Innovation*". Journal of Marketing Theory & Practice*, Vol. 8 (3), 6-7.

109. Madapati, R. (2004) "Intel: Shaping the organizational culture", *ICFAI Center for Management Research Case*, ICFAI 404-086-1, p. 3.

110. Kumar Singh N., Srikanth, G. (2004) "L'Oreal's Business Strategy" *ICFAI case* N. 304-204-1, p. 3.

111. Barco n.v. (2008), "*Company Brochure"*, www.barco.com.

112. Iyer, B. Davenport, T. (2008) "Reverse Engineering Google's Innovation Machine", *Harvard Business Review*, April, 1-12

113. Subdhadra, K., Dutia S. (2006) "3M's Organizational Culture" *ICFAI case*, No 403-041-1, p. 5

114. Tidd, J., Bessant, J. & Pavitt, K. (2005) *Managing innovation: Integrating technological, market and organizational change (3rd edition)*, John Wiley & Sons Ltd., Chicester.

115. Iyer, B, Davenport, T. (2008) "Reverse Engineering Google's Innovation Machine", *Harvard Business Review*, April, p. 8.

116. Kotnour, T. (1999) "*A Learning Framework for Project Management*", *Project Management Journal*, Vol 30 (2), 32- 37.

117. Sharp, D. (2003) "Knowledge Management Today: Challenges and Opportunities", *Information Systems Management*, Vol. 20 (2), 32-37.

118. Donepudi A., Merci, M. (2006) "Innovation at Whirpool: The DNA of Corporate Culture*", ICFAI Case*, No. 306-504-1, p. 6.

119. McGregor, J. (2005) "Gospels of Failure", *Fast Company,* February (91), 62-67.

120. Jamrog, J., Vickers, M., Bear, D. (2006) "Building and Sustaining a Culture that Supports Innovation", *Human Resource Planning*, Vol. 29 (3), p. 14.

121. Perepu, I. (2007) "McKinsey's knowledge management practices", *ICFAI Center for Management Research Case*, ICFAI 907-025-1, p. 2.

122. Hansen, T., M, Nohria N., Tierney, T. (1999) "What is your strategy for managing knowledge?" *Harvard Business Review*, Vol 77 (2), p.115.

123. Subhadra, K., Dutia, S. (2003) "3M's Organizational Culture", *ICFAI case,* No. 403-041-1, p. 6-7.

124. Website Open Innovation: http://www.openinnovation.eu/openinnovatie.php.

125. Anderson, U., Forsgren, M. & Holm, U. (2002) "The Strategic Impact of external networks" *Strategic Management Journal,* Vol. 23 (11), 979-995.

126. Hurley, R. & Hult, T. (1998) "Innovation, Market Orientation, and Organizational Learning: An Integration and Empirical Examination", *Journal of Marketing*, Vol. 62 (July), p. 46.

127. Kohli, A. & Jaworski, B. (1990) "Market Orientation: The Construct, Research Propositions, and Managerial Implications", *Journal of Marketing*, Vol. 54 (2), p. 1-18, p. 5.

128. Karami, A. (2007) *Strategy Formulation in Entrepreneurial Firms,* Ashgate Publishing, Hampshire, p. 124.

129. Hertenstein, J. & Marjorie, B.P. (2000) "Performance measures and management control in New Product Development", American Accounting Association, Vol. 14 (3), 303-323.

130. Jamrog, J., Vickers, M., Bear, D. (2006) "Building and Sustaining a Culture that Supports Innovation", *Human Resource Planning*, Vol. 29 (3), p. 16.

131. Chan, V., Musso, C. and Shankar, V. (2008) "McKinsey Global Survey Results: Assessing innovation metrics", *The McKinsey Quarterly*, October, 1-11.

132. Chan, V., Musso, C. and Shankar, V. (2008) "McKinsey Global Survey Results: Assessing innovation metrics", *The McKinsey Quarterly*, October, 1-11.

133. Ibid, p. 5

134. Subhadra, K., Dutia, S. (2003) "3M's Organizational Culture", *ICFAI case,* No 403-041-1, p. 6.

135. Depreew, G., Escalier, J. & Vandenbusche, E. (2008) "Performance analysis of the New Product Introduction Process in a high-tech company", *Final Assignment for the Masters in General Management at Vlerick Leuven Gent Management School*, Vlerick Leuven Gent Management School, p. 21.

136. Davila, T., Epstein, M.J. & Shelton, R. (2006) *Making innovation work: How to manage it, measure it, and profit from it*, Wharton School Publishing, Upper Saddle River, NJ.

137. Ibid, p. 150.

138. Ibid. p. 151.

139. Ibid. p. 151.

140. Ibid. p. 152.

141. Ibid., p. 190.

142. Davila, T., Epstein, M.J. and Shelton, R. (2006) *Making innovation work: How to manage it, measure it, and profit from it*, Wharton School Publishing, Upper Saddle River, NJ.

143. Davila, T., Epstein, M.J. and Shelton, R. (2006) *Making innovation work: How to manage it, measure it, and profit from it*, Wharton School Publishing, Upper Saddle River, NJ.

144. Tidd, J., Bessant, J. and Pavitt, K. (2005) *Managing innovation: Integrating technological, market and organizational change (3rd edition)*, John Wiley & Sons Ltd., Chicester.

145. Ibid.

146. Petit, G., Delafortry, B. (2009) "Innovation at Alcatel Lucent: Some Bad and Best Practices", *Dexia Lead an Organization Programme,* Edition 6, Module 3.

147. Davila, T., Epstein, M.J. & Shelton, R. (2006) *Making innovation work: How to manage it, measure it, and profit from it*, Wharton School Publishing, Upper Saddle River, NJ.

148. Tidd, J., Bessant, J. and Pavitt, K. (2005) *Managing innovation: Integrating technological, market and organizational change (3rd edition)*, John Wiley & Sons Ltd., Chicester.

149. Kolb, D. & Fry, R. (1975) "Towards a theory of applied experiential learning" in Cooper, C. (Ed.) *Theories of group processes*, John Wiley & Sons Ltd., Chicester.

150. Tidd, J. and Bessant, J. (2009) *Managing innovation: Integrating technological, market and organizational change (4rd edition)*, John Wiley & Sons Ltd., Chicester, 592-93.

151. Davila, T., Epstein, M.J. and Shelton, R. (2006) *Making innovation work: How to manage it, measure it, and profit from it*, Wharton School Publishing, Upper Saddle River, NJ, p. 210.

152. Barrows, E. (2005) "Walk the Talk: Effective Leadership Behaviour for BSC Review Meetings*", Balance score card Report*, HBSP September, p. 1-2.

153. Ibid.

154. Coombs, G. and Gomez-Mejia, L.R. (1991) "Cross-functional pay strategies in high-technology firms", *Compensation and Benefits Review*, Vol. 23, 40–48.

155. Hong Tau L., Sheu Hua, C., Jie Min, L. (2006) "K-means method for rough classification of R&D employees' performance evaluation", *International Transactions in Operational Research*, Vol. 13 (4), p. 366.

156. Madapati, R. (2004) "Intel: Shaping the Organizational Culture*", ICFAI case*, No 404-086-1, p. 1-15, p. 12.

157. Archer, A. & Walczyk, D. (2006) “Driving creativity and Innovation through Culture”, *Design Management Review,* Vol 17 (3), p.16.

158. Jamrog, J., Vickers, M., Bear, D. (2006) “Building and Sustaining a Culture that Supports Innovation”, *Human Resource Planning*, Vol. 29 (3), p. 17.

159. Davila, T., Epstein, M.J. and Shelton, R. (2006) *Making innovation work: How to manage it, measure it, and profit from it*, Wharton School Publishing, Upper Saddle River, NJ., p. 181.

160. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester.

161. Leavitt, P. (1994) “*Rewarding Innovation*”, American Productivity and Quality Centre, http://www.bettermanagement.com/library/library.aspx?l=5558, (website accessed on 29 April).

162. Subhadra, K., Dutia, S. (2003) “3M’s Organizational Culture”, *ICFAI case,* No 403-041-1, p. 7.

163. Kaufman, H.G. (1975) “*Career Management: A Guide to Combating Obsolescence*”, IEEE Press, Madison.

164. Katz, R., Tushman, M., Allen, T. (1977) “The Influence of Supervisory Promotion and Network Location on Subordinate Careers in a Dual Ladder RD&E Setting*”, Management Science Vol. 41 (5),* p. 849.

165. Subhadra, K., Dutia, S. (2003) “3M’s Organizational Culture”, *ICFAI case,* No 403-041-1, p. 7.

166. Purkayastha, D. (2006) “Pixar’s incredible culture”, *ICFAI Center for Management Research Case*, ICFAI 406-077-1, p. 9.

167. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester.

168. Subhadra, K. (2003) “3M’s organizational culture”, *ICFAI Center for Management Research Case*, ICFAI 403-041-1, p. 5.

169. Westland, J.C. (2008) *Global innovation management: A strategic approach*, Palgrave Macmillan, Houndmills, p. 293.

170. Ibid.

171. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester.

172. Regani, S. & Dutta, S. (2003) “Nokia – Fostering Innovation*”, ICMR case*, No. 403-040-1, p. 4.

173. Madapati, R. (2004) “Intel: Shaping the organizational culture”, *ICFAI Center for Management Research Case*, ICFAI 404-086-1, p. 10.

174. Tidd, J., Bessant, J. and Pavitt, K. (2005) *Managing innovation: Integrating technological, market and organizational change (3rd edition)*, John Wiley & Sons Ltd., Chicester.

175. Purkayastha, D. (2006) "Pixar's incredible culture", *ICFAI Center for Management Research Case*, ICFAI 406-077-1, p. 12.

176. Von Stamm, B. (2008) *Managing innovation, design and creativity*, John Wiley Sons Ltd, Chicester, p. 413.

177. Subhadra, K., Dutta, S. (2004) "Google's Organizational Culture", *ICMR case*, No. 404-16-1, p. 5.

178. Warren, C. (2004) "Innovation Inc", www.americanwaymag.com, (website accessed on 02 May 2009).

179. Purkayastha, D. & Fernando, R. (2006) "Pixar's 'Incredible' culture*" ICMR case*, No. 406-77-1, p. 9.

180. Archer, A. & Walczyk, D. (2006) "Driving creativity and Innovation through Culture", *Design Management Review,* Vol 17 (3), p.16.

181. Deschamps, J.-P. (2008) *Innovation leaders: How senior executives stimulate, steer, and sustain innovation*, John Wiley & Sons Ltd, Chicester.

182. Tidd, J. and Bessant, J. (2009) *Managing innovation: Integrating technological, market and organizational change (4rd edition)*, John Wiley & Sons Ltd., Chicester, p. 134.

183. Isaksen, S. and Tidd, J. (2006) *Meeting the innovation challenge*, John Wiley & Sons Ltd., Chicester.

184. Kets de Vries, M. and de Vitry d'Avaucourt, R. (2007) "Cirque du Soleil: Attaining 'extreme creativity'", *INSEAD Business case*, INSEAD 407-032-1, p. 4.

185. Pawar, M. (2007) "Innovation at Cirque du Soleil", *ICFAI Center for Management Research Case*, ICFAI 307-353-1, p. 9.

186. Davila, T., Epstein, M.J. and Shelton, R. (2006) *Making innovation work: How to manage it, measure it, and profit from it*, Wharton School Publishing, Upper Saddle River, NJ.

187. Subhadra, K., Dutia, S. (2003) "3M's Organizational Culture", *ICFAI case,* No 403-041-1, p. 7.

188. Jamrog, J., Vickers, M., Bear, D. (2006) "Building and Sustaining a Culture that Supports Innovation", *Human Resource Planning*, Vol. 29 (3), p. 16.

189. Sweeney, J. (2004) *Innovation at the speed of Laughter: 8 Secrets to world class Idea Generation*, Aerialist Press, Minneapolis.

190. Cooper, R.G. (2004) *Product leadership: Pathways to profitable innovation (2nd edition)*, Basic Books, New York, p. 254.

191. Hurley, R. & Hult, T. (1998) “Innovation, Market Orientation, and Organizational Learning: An Integration and Empirical Examination”, *Journal of Marketing*, Vol. 62 (July), p. 46.

192. Vemuri, K. (2005) “Innovation at Pixar: The key to sustainable profitability?”, *ICFAI Center for Management Research Case*, ICFAI 305-189-1, p. 2-3.

193. 1Hurley, R. & Hult, T. (1998) “Innovation, Market Orientation, and Organizational Learning: An Integration and Empirical Examination”, *Journal of Marketing*, Vol. 62 (July), p. 46.

194. Shepard. C., Herbert, A. (1967) “Innovation-Resisting and Innovation-Producing Organizations”, *Journal of Business,* Vol. 40 (4), 470-477.

195. Madapati, R. (2004) “Intel: Shaping the Organizational Culture*”,* ICFAI case, No 404-086-1, p. 5.

196. Cooper, R.G. (1998) *Product leadership: Creating and launching superior new* products, Basic Books, New York, p. 240.

197. Tidd, J. and Bessant, J. (2009) *Managing innovation: Integrating technological, market and organizational change (4rd edition)*, John Wiley & Sons Ltd., Chicester, p. 496.

198. Small Business Encyclopaedia: “Cross Functional Teams”, http://www.answers.com/topic/cross-functional-team, (website accessed on 05 May).

199. Pawha, A., Deschamps J.P, (2005), “Innovation Leadership at Logitech”, *case IMD*-3-1337, p.14

200. Treacy, M. and Wiersema, F. (1995) “The winning ways of Product Leaders”, *Directors & Boards,* Vol 19 (3), p. 39.

201. McGinnis, Michael A. and M. Robert Ackelsberg (1983), “*Effective Innovation Management: Missing Link in Strategic Planning*?” Journal of Business Strategy*,* Vol. 4 (1), 59-66.

202. Cooper, R.G. (1998) *Product leadership: Creating and launching superior new* products, Basic Books, New York, p. 70.

203. Lorsch, J.W. (2001) “McKinsey & Co.”, *Harvard Business School Case*, 9-402-014, p. 9.

204. Treacy, M. & Wiersema, F. (1995) “The winning ways of Product Leaders”, *Directors & Boards,* Vol 19 (3), p. 38.

205. Khanna, R. (2008) “Google’s leadership: The cutting edge”, *ICFAI Center for Management Research Case*, ICFAI 408-051-1, p. 2 and p. 6.

206. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) “Innovation in service firms explored: What, How and Why?” *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 44.

207. Storey, C. Kelly, D. (2001) “Measuring the Performance of New Service Development Activities”, *The Service Industries Journal”,* Vol. 21 (2), p. 71-90.

208. Easingwood, C. J. (1986) “New Product Development for Service Companies”, *Journal of Product Innovation Management*, Vol. 3 (4), p. 264.

209. Cowell, D. (1988) “New Service Development”, *Journal of Marketing Management”,* Vol. 3 (3), p. 296-312, p. 305.

210. Vermeulen, P., Dankbaar, B. (2002) The organization of Product Innovation in the Financial Sector, *The Services Industry Journal*, Vol. 22 (3), p. 77-98

211. Cowell, D. (1988), “New Service Development”, *Journal of Marketing Management”,* Vol. 3 (3), p. 296-312, p. 306.

212. Oke, A. (2004) “Barriers to innovation management in service companies” *Journal of Change Management*, Vol. 4 (1), p31-44.

213. Tatikonda, M.V. and Zeithaml, V. A. (2001) “Managing the New Service Development Process: Multidisciplinary Literature Synthesis and Directions for Future Research”, chapter in *New Directions in Supply Chain Management: Technology, Strategy and Implementation*, Boone and Ganeshan, eds., AMACOM, p. 204.

214. Johnston, R., Bryan, R., (1993), “Products and Services - A Question of Visibility”, *Service Industries Journal,* Vol. 13(3), 25-36.

215. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) “Innovation in service firms explored: What, How and Why?” *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer.

216. Johne, A. and Storey, C. (1998) “New Service Development: A review of the Literature and Annotated Bibliography”*, European Journal of Management*, Vol. 32 (3), p184.

217. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) “Innovation in service firms explored: What, How and Why?” *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 18

218. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) “Innovation in service firms explored: What, How and Why?” *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 18

219. Easingwood, C. J. (1986) “New Product Development for Service Companies”, *Journal of Product Innovation Management*, Vol. 3 (4), p. 270.

220. Sundbo, J. (1997) “Management of Innovation in Services”, *The Service Industries Journal*, Vol. 17(3), p. 432-435 p. 453.

221. Easingwood, C. J. (1986) “New Product Development for Service Companies”, *Journal of Product Innovation Management*, Vol. 3 (4), p. 272.

222. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) “Innovation in service firms explored: What, How and Why?” *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 18

223. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) “Innovation in service firms explored: What, How and Why?” *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 18

224. Kelly, D., and Storey, C. (2000), “New Service Development: initiation strategies”, *International Journal of Service Industry Management,* Vol. 11 (1), p. 45-62.

225. Thomke, S., (2003) “R&D comes to Services”, *Harvard Business Review,* Vol. 81 (4), p70-79.

226. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) “Innovation in service firms explored: What, How and Why?” *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer.

227. McGrath, R., MacMillan, I. (1995) “Discovery-Driven Planning”, *Harvard Business Review,* Vol. 73 (4), p44-54.

228. Easingwood, C. J. (1986) “New Product Development for Service Companies”, *Journal of Product Innovation Management*, Vol. 3 (4), p. 272.

229. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) “Innovation in service firms explored: What, How and Why?” *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 41.

230. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) “Innovation in service firms explored: What, How and Why?” *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 41.

231. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) “Innovation in service firms explored: What, How and Why?” *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 44.

232. Van der A, W., Elfring, T. (2002), “Realizing innovation in services”, *Scandinavian Journal of Management* Vol. 18 (2), 155-171.

233. Garvin, D., Edmondson, A., Gine, F. (2008), “Is yours a Learning Organization?” *Harvard Business Review*, Vol. 86 (3), p. 109-116.

234. Garvin, D., Edmondson, A., Gine, F. (2008), “Is yours a Learning Organization?” *Harvard Business Review*, Vol. 86 (3), p. 109-116.

235. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) “Innovation in service firms explored: What, How and Why?” *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 39.

236. Storey, C. Kelly, D. (2001) “Measuring the Performance of New Service Development Activities” , *The Service Industries Journal”,* Vol. 21 (2), p. 71-90.

237. Garvin, D., Edmondson, A., Gine, F. (2008), “Is yours a Learning Organization?” *Harvard Business Review*, Vol. 86 (3), p. 109-116.

238. Irons, K. (1993) *Managing Service companies: Strategy for Success,* Addison-Wesley Publishing Company, Wokingham, p. 11.

239. Cowell, D. (1988), "New Service Development", *Journal of Marketing Management,* Vol. 3, p. 311.

240. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) "Innovation in service firms explored: What, How and Why?" *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 39.

241. Tatikonda, M.V. and Zeithaml, V. A. (2001) "Managing the New Service Development Process: Multidisciplinary Literature synthesis and directions for Future Research", chapter in *New Directions in Supply Chain Management: Technology, Strategy and Implementation*, Boone and Ganeshan, eds., AMACOM.

242. Lyons, R., Chatman, J. A., Joyce, C. K. (2007) "Innovation in Services: Corporate Culture and Investment Banking", *California Management Review,* Vol. 50 (1), p. 174-191, p. 175.

243. Lyons, R., Chatman, J. A., Joyce, C. K. (2007) "Innovation in Services: Corporate Culture and Investment Banking", *California Management Review,* Vol. 50 (1), p. 174-191, p. 179.

244. Vermeulen, P., Dankbaar, B. (2002) The organization of Product Innovation in the Financial Sector, *The Services Industry Journal*, Vol. 22 (3), p. 77-98

245. Katzenbach, J. R & Smith, D. K. (1993) *The Wisdom of teams: Creating the high-performance organization'*, Harvard Business School Press, Boston.

246. Terril, C. (1992), "The Ten Commandments of New Service Development", *Management Review,* February, p. 24-27, p. 25.

247. Fröhle, C.M., A.V. Roth, R.B. Chase and C.A. Voss (2000), "Antecedents of new service development effectiveness: An exploratory examination of strategic operations choices" *Journal of Service Research,* Vol. 3 (1), p. 3-17.

248. Edvardsson, B., L. Haglund and J. Mattsson (1995), "Analysis, planning, improvisation and control in the development of new services", *International Journal of Service Industry Management*, Vol. 6 (2), p. 24-35.

249. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) "Innovation in service firms explored: What, How and Why?" *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 40.

250. De Jong, J. P., Bruins, A., Dolsfma, W., Meijaard, J. (2003) "Innovation in service firms explored: What, How and Why?" *EIM Business Policy Research, Strategic Study B200205*, Zoetermeer, p. 45.

251. Deloitte website: http://www.deloitte.com/view/en_BE/be/about/index.htm

252. Iyer, B., Davenport, T. (2008) "Reverse engineering: Google's innovation machine," *Harvard Business Review*, April, 1-12.

253. Schelfout, S. And Spyns, P. (2009) “Combining business and creativity, therein lies the success of Studio 100: An interview with Hans Bourlon, Manager of the Year and co-founder of Studio 100”, *EWI Review (Periodical of the Department of Economy, Science, and Innovation)*, September, p. 41.

254. Bourlon, H. (2009), *Speech for the International Full-Time MBA students of Vlerick Leuven Gent Management School*, March 12th.

255. www.vrt.be.

256. Ibid.

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